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ABSTRACT

This report of Market Data Retrieval's second comprehensive survey of microcomputers and their use in grades K-12 presents information for the 1984-85 year for public, private, and Catholic schools in the United States. The survey findings are summarized in a brief introduction, and detailed data are presented in the 37 tables and 9 maps that accompany the narrative report. Areas covered include microcomputer use by school type, micro-intensity by grade level and type of school, brand distribution, and growth trends. Findings indicate that: (1) U.S. schools are now using 630,000 microcomputers, a 75% increase over the 1983-84 school year; (2) public school use of micros (85.1%) still exceeds private (46.4%) and Catholic school (63.4%) use; (3) senior high schools still lead the way with 94.6% using microcomputers, but junior high schools are now at 93.1% and elementary schools at 82.2%; (4) 94.2% of U.S. public school districts now use microcomputers for instruction (an increase of 86.1% over last year, and 41.7% over 4 years ago); (5) Apple computer remains the most common microcomputer brand, with a 50.9% share of the market; (6) Radio Shack is second with a 19.7% share and Commodore is third with 15.2%; (7) IBM had the fastest growth rate, moving to a 3.5% share of the market; (8) while the number of children sharing a computer has been reduced in both wealthy and poor schools (54 versus 73.3), wealthy schools are making improvements at a faster pace. State rankings, state profiles, and survey methodology and definitions are appended. (JB)

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# Microcomputers in Schools, 1984-85
## A Comprehensive Survey and Analysis

By
John F. Hood and the Staff of
Curriculum Information Center
a division of
Market Data Retrieval

May 1985

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NEWS RELEASE

(for immediate release)

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## 630,000 MICROCOMPUTERS IN U.S. SCHOOLS--UP 75% IN ONE YEAR

Westport, Connecticut--July, 1985--U.S. schools are now using 630,000 microcomputers according to "Microcomputers in Schools 1984-85" ($50 paperbound), a new research study just published by Market Data Retrieval (MDR). The figure represents a 75% increase in micros in schools over the 1983-84 school year. Based on phone calls to 15,275 U.S. school districts, the new study provides the most comprehensive picture to date of the growing role of the microcomputer in education, including four-year trends, brand distribution and detailed state rankings.

When the first edition of "Microcomputers in Schools" was published last year, Electronic Learning magazine called it "invaluable." The new edition is now completely revised and updated to reflect changes and trends that have occurred during the past year, and it includes much new data on private and Catholic schools. The study reveals that 94.2% of U.S. public school districts now use microcomputers for instruction, up from 86.1% a year ago (41.7% four years ago). Apple computer still leads the way over all other brands with 50.9% share of the market.

Large school purchases of microcomputers during the past year have been closing the gaps in microcomputer use among schools of various types and grade levels. Public school use of micros (85.1%) still exceeds private school use (46.4%) and Catholic school use (63.4%). However, the difference is not as pronounced as it was last year when public schools using micros outranked private and Catholic schools by more than three times. The gaps are also closing with regard to micro use by grade level. While senior high schools still lead the way with 94.6% using micros, junior high schools are now at 93.1% and elementary schools at 82.2%.

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One area where gaps are not closing (in fact, they appear to be widening) is in the use of microcomputers in wealthy vs. poor schools. "Microcomputers in Schools" establishes a new statistic, Micro-Intensity, designed to calculate the number of children that have to share a computer. While the number of children sharing a computer has been reduced in both wealthy and poor schools (54 vs. 73.3), wealthy schools are making improvements at a far faster pace.

Apple computers are the most heavily used in the school market by far, with a 50.9% share of market and 290,000 installed. Second is Radio Shack with 19.7% share of market and 112,000 installed, and third is Commodore with 15.2% and 86,400 installed. Apple's unit share increased from last year while Radio Shack's declined and Commodore's held steady. IBM had the greatest growth rate, moving to a 3.5% share of market. Radio Shack and IBM are both used more heavily in secondary schools, while Apple and Commodore are used evenly throughout all grades.

Market Data Retrieval, Westport, Connecticut, publisher of "Microcomputers in Schools 1984-85," is the leading compiler of U.S. education market data. The company maintains a database covering all U.S. schools, colleges and public libraries and sells directories and mailing lists in these areas. In addition, Market Data Retrieval sells mailing lists from two other major databases it maintains: the Electronic Yellow Pages, covering 10 million business locations, and the American Executive Registry, which lists 9 million top and middle management executives by title and function.



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I

## INTRODUCTION

The 1983-84 school year was a banner year for the installation of microcomputers to assist instruction. The number of micros in public schools jumped by 75% from Fall 1983 to Fall 1984. This represents a phenomenal growth rate considering the fact that micros were already installed in 68% of public schools in the Fall of 1983. By Fall 1984, over 630,000 microcomputers were available for student instruction in public, private, and Catholic schools.

Nevertheless, this report shows that there are vast disparities in computer use. Some 23,000 schools still did not have one microcomputer as of Fall 1984, and among schools that were using them, the potential for student access varied widely. Further, the data shows that richer schools appear to be pushing ahead faster than poorer schools. Leading the way in providing student access are non-Catholic private schools (at least those that use micros in curriculum applications) and public schools in wealthy districts.

Just how valuable the microcomputer is as an educational tool has not yet been determined. That subject needs much more study. The appropriate level of computer availability (the Micro-Intensity level) needs further study also. However, assuming computers are of educational benefit, the trends shown in this study are disturbing. The students who need them most may get to use them least.

At the present rate of increase in installations, our next surveys could show as many as 1,000,000 microcomputers in our schools, representing a cumulative investment of about one billion dollars for equipment, plus countless other expenditures for software, supplies, peripherals, and training. A parallel investment in time and effort has also been made by school administrators and teachers. This report is intended for anyone interested in gaining a clearer understanding of the extent of use of microcomputers in education. It is Market Data Retrievals second comprehensive survey on this subject. The first was published last year, titled Microcomputers in Schools 1983-1984.

II

## DISTRIBUTION OF SCHOOLS USING MICROCOMPUTERS

## AND FOUR YEAR TRENDS

TABLE 1 U.S. PUBLIC SCHOOL DISTRICTS WITH MICROS: 1981 - 1984

| | Fall 1981 | Fall 1982 | Fall 1983 | Fall 1984 |
|---|---|---|---|---|
| All Districts | 15,442 | 15,314 | 15,275 | 15,251 |
| Districts using Micros | 6,441 | 9,245 | 13,151 | 14,367 |
| % using Micros | 41.7% | 60.4% | 86.1% | 94.2% |

The rapid growth in the use of microcomputers in U.S. schools has continued. Currrently 14,367 of U.S. public school districts, 94.2% of the total, use microcomputers for instruction, up from 13,151 one year ago. This compares to only 41.7% of districts in the Fall of 1981, only four years ago. See Table 1, above. Map 1 shows that in many states the proportion is 100% of districts or close to it.

A district using a microcomputer for instruction is defined for purposes of this report as a district in which at least one of its constituent schools is using a microcomputer for instructional purposes. Consequently, the proportion of districts using micros masks much larger changes in computer use in the schools.

MAP 1

U.S. PUBLIC SCHOOL DISTRICTS

PERCENT USING MICROCOMPUTERS, FALL 1984

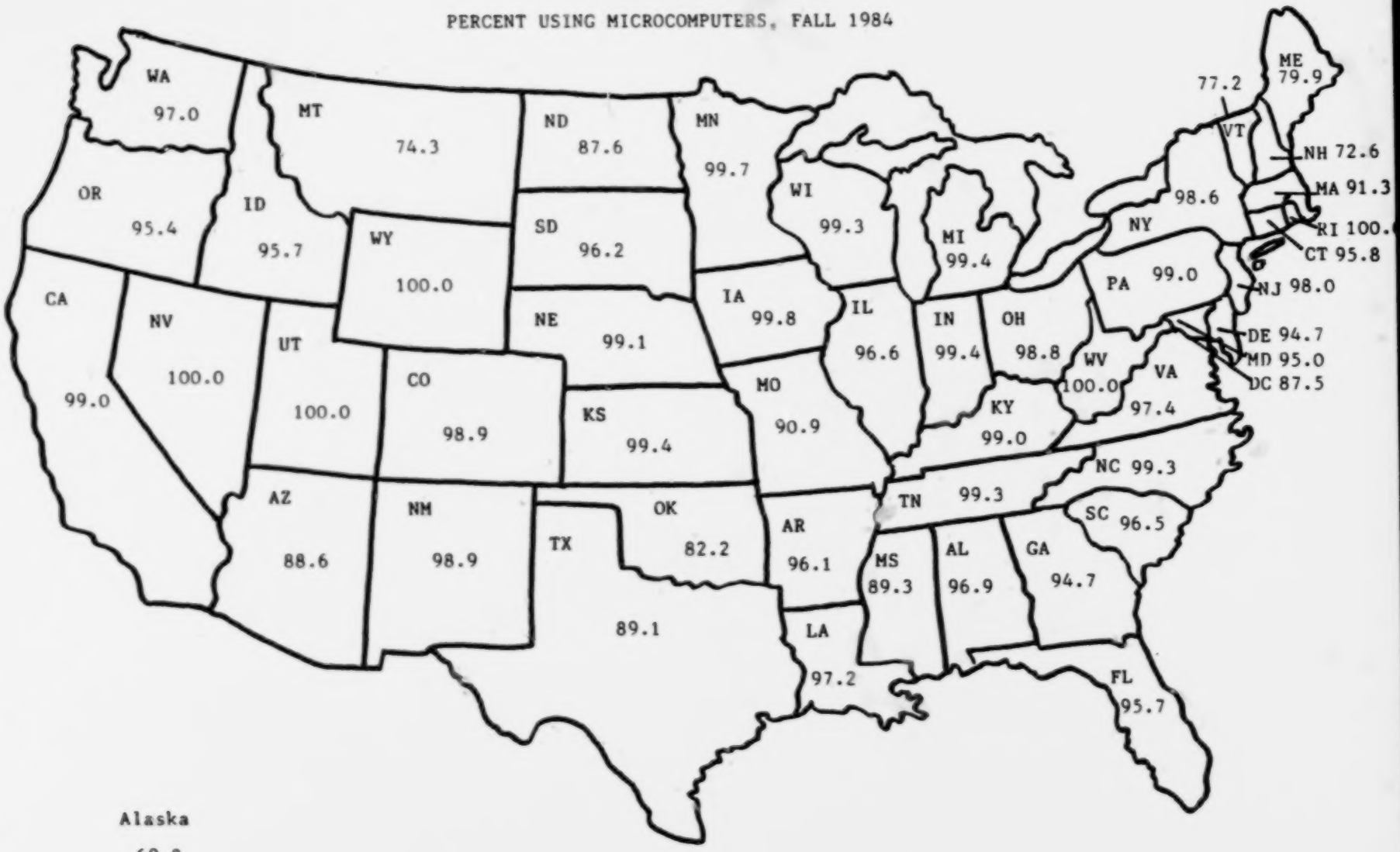


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Table 2 below shows a four year comparison of the percent of public schools using microcomputers. The table shows data for all public schools and also comparisons for elementary, junior high, and senior high schools.

Over four years, the percent of all public schools using micros has grown from 18.2% (15,328 schools) to 85.1% (69,003), a tremendous increase. The largest year-to-year increase was from Fall 1982 to Fall 1983 when over 30,000 schools became micro users. As the proportion of schools reaches 100% the annual increase in new micro using schools must decline.

Senior highs were the pioneers in micro use. Even in 1981, over 40% were already using at least one computer. By the Fall of 1984, almost 95% of senior highs had one or more. Junior highs, which lagged behind senior highs by a year in the proportion using micros as late as the Fall of 1982, have almost completely caught up.

TABLE 2 SCHOOLS WITH MICROCOMPUTERS

| | Fall 1981 | Fall 1982 | Fall 1983 | Fall 1984 |
|---|---|---|---|---|
| All Public Schools | 84,225 | 82,422 | 81,506 | 81,100 |
| Number using Micros | 15,328 | 24,696 | 55,765 | 69,003 |
| % using Micros | 18.2% | 30.0% | 68.4% | 85.1% |
| Elementary Schools | 53,268 | 51,940 | 51,277 | 50,967 |
| Number using Micros | 5,884 | 10,467 | 31,991 | 41,901 |
| % using Micros | 11.1% | 20.2% | 62.4% | 82.2% |
| Junior High Schools | 10,106 | 9,926 | 9,846 | 9,791 |
| Number using Micros | 2,585 | 3,950 | 7,922 | 9,114 |
| % using Micros | 25.6% | 39.8% | 80.5% | 93.1% |
| Senior High Schools | 15,589 | 15,297 | 15,211 | 15,152 |
| Number using Micros | 6,051 | 8,842 | 13,094 | 14,340 |
| % using Micros | 42.7% | 57.8% | 86.1% | 94.6% |

There are twice as many elementary schools as junior and senior highs combined, and they were the last schools to begin using micros. However, with 20,000 new users between 1982 and 1983 and another 10,000 in the last year, 82% or over 40,000 elementary schools are now micro users.

Another way to look at these statistics is at the number of public schools who are not micro users. About 12,000 schools in the Fall of 1984 were not users. While still a sizeable amount, in 1983 there were over 25,000 non-users, and in the Fall of 1982, 57,000 non-users. By the Fall of 1985, it's likely only a few thousand will remain non-users. See Table 3 below.

| TABLE 3 PUBLIC SCHOOLS NOT USING MICROCOMPUTERS | | | |
|---|---|---|---|
| Fall 1981 | Fall 1982 | Fall 1983 | Fall 1984 |
| 68,897 | 57,726 | 25,741 | 12,097 |

Map 2 shows the percent of schools using microcomputers in each state. Only four states are behind what was the national average in the Fall of 1983, 68.4%; they are Hawaii, Louisiana, Mississippi, and Nebraska. This demonstrates the relative speed with which microcomputers are being accepted in the nation's public schools.

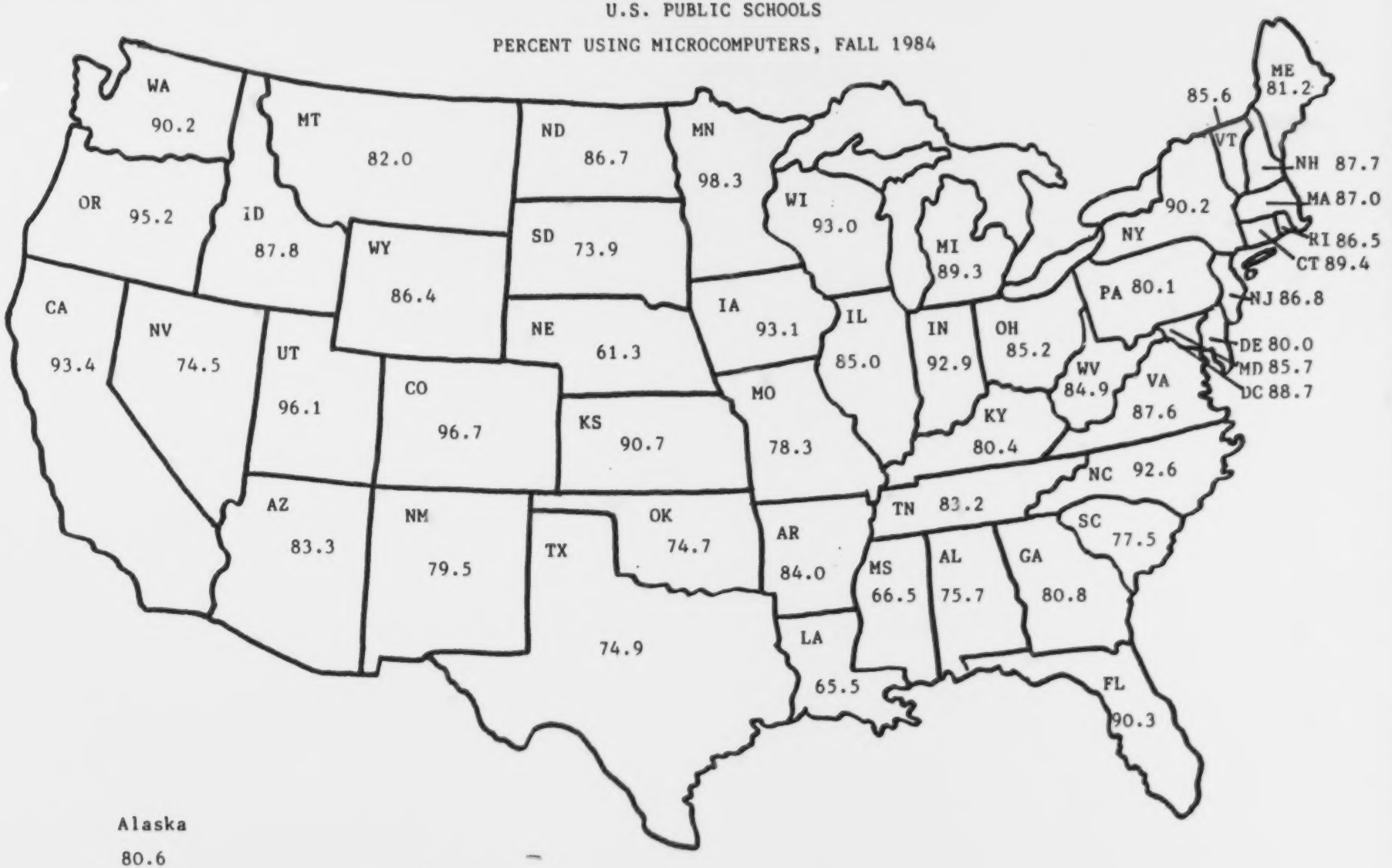
Table 4 compares the percent of schools using micros each Fall by grade range and in total. Again, it is clear that outside of the 18% of non-using elementary schools, public schools are approaching 100% useage quickly.

| TABLE 4 PUBLIC SCHOOL GROWTH TRENDS BY SCHOOL LEVEL - % WITH MICROS | | | | |
|---|---|---|---|---|
| | Elementary Schools | Junior High Schools | Senior High Schools | All Schools |
| Fall '81 | 11.1% | 25.6% | 42.7% | 18.2% |
| Fall '82 | 20.2% | 39.8% | 57.8% | 30.0% |
| Fall '83 | 62.4% | 80.5% | 86.1% | 68.4% |
| Fall '84 | 82.2% | 93.1% | 94.6% | 85.1% |

MAP 2

U.S. PUBLIC SCHOOLS

PERCENT USING MICROCOMPUTERS, FALL 1984




Alaska
80.6

Hawaii
67.1

U.S. Average 85.1%



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Table 5 compares microcomputer useage to public school district poverty level. Poverty levels are derived from the proportion of students in a school district below Federal poverty guidelines. The Department of Education assigns census derived poverty data to school districts. The data shown below for the Fall of 1981, 1982, and 1983 were based on the 1970 census. The data for Fall 1984 reflects the 1980 census.

In the Fall of 1981, at the onset of the microcomputer revolution, the proportion of schools with the lowest poverty percentage ("rich schools") using microcomputers was 2½ times greater than that of the highest poverty schools ("Poor schools"), 29.8% vs. 12.0%. By the Fall of 1984, the percentage of use in both categories had risen, but the difference between the two had decreased, 91.7% vs. 74.4%. However, it should be noted that this apparent "closing of the gap" masks significant differences in the number of microcomputers available in each school and differences in the Micro-Intensity (student to computer ratio) in "rich" and "poor" schools. These issues are addressed in Sections III and IV.

TABLE 5 DISTRICT POVERTY LEVEL AND MICRCOMPUTER USE

| Poverty Level | Fall 1981 | Fall 1982 | Fall 1983 | Fall* 1984 |
|---|---|---|---|---|
| .0 - 4.9% ("Rich") | | | | |
| Total Schools | 12,112 | 11,679 | 11,421 | 10,761 |
| Using Micros | 3,613 | 5,133 | 9,481 | 9,866 |
| % using Micros | 29.8% | 44.0% | 83.0% | 91.7% |
| 5.0 - 11.9% | | | | |
| Total Schools | 26,220 | 25,653 | 25,327 | 24,902 |
| Using Micros | 5,606 | 9,002 | 19,435 | 22,890 |
| % using Micros | 21.4% | 35.1% | 76.7% | 91.9% |
| 12.0 - 24.9% | | | | |
| Total Schools | 28,377 | 27,904 | 27,752 | 31,059 |
| Using Micros | 4,764 | 7,681 | 18,446 | 26,339 |
| % using micros | 16.8% | 27.5% | 65.6% | 84.8% |
| 25.0+% ("Poor") | | | | |
| Total Schools | 14,072 | 13,929 | 13,854 | 12,076 |
| Using Micros | 1,685 | 2,554 | 7,337 | 8,978 |
| % using Micros | 12.0% | 18.3% | 53.0% | 74.4% |

* 1980 Census Based

Table 6 relates microcomputer using schools to population density. A slightly higher percent of suburban schools are micro users compared to rural schools, with urban schools lagging. Again, the small differences in percent of schools using computers may mask larger differences in more important measures.

TABLE 6 SCHOOLS WITH MICROS BY METRO CLASS, FALL 1983

| | Urban | Suburban | Rural |
|---|---|---|---|
| Total Schools | 19,780 | 23,970 | 34,297 |
| Using Micros | 16,155 | 21,462 | 28,813 |
| % using Micros | 81.7% | 89.5% | 84.0% |

Table 7 compares the percent of public schools using microcomputers to use in Catholic and non-Catholic private schools. Between 1983 and 1984 the number of non-Catholic private schools using computers more than doubled. Use in Catholic schools almost tripled. However, both still lag behind public school use by substantial margins.

In comparing this data, please note that public schools are surveyed in the summer, between school years, for the upcoming school year. Fall 1984 data was gathered from July 1 to September 15, 1984. Private and Catholic schools are surveyed during the school year, approximately January to March. Consequently, the private school data that compares to the Fall 1984 and Fall 1983 public school data was compiled six months earlier.

TABLE 7 PRIVATE AND PUBLIC SCHOOL COMPARISONS

| | Private* | Catholic* | Public* | Total All Schools |
|---|---|---|---|---|
| All Schools 1983 | 13,408 | 9,463 | 81,506 | 104,330 |
| Using Micros | 3,293 | 2,143 | 55,765 | 61,201 |
| % using Micros | 24.6% | 22.8% | 68.4% | 58.7% |
| All Schools 1984 | 14,946 | 9,463 | 81,100 | 105,509 |
| Using Micros | 6,936 | 5,995 | 69,003 | 81,934 |
| % using Micros | 46.4% | 63.4% | 85.1% | 77.7% |

* Timing varies; See Methodology, Appendix C

In fact, in 1984 neither private nor Catholic schools are quite as far along as the public schools were in Fall 1983 (six months earlier). Non-Catholic private schools are conspicuously lagging behind in adopting microcomputers. On the other hand, of 105,509 elementary and secondary schools in the U.S., 81,934 or 77.7% are now micro users.

III

## DISTRIBUTION OF MICROCOMPUTERS

There are almost 632,000 microcomputers installed for instructional purposes in public, private and Catholic schools in the U.S. If an assumption of $1000 cost per installed microcomputer is made, the value of this equipment is $632,000,000, a substantial sum for a new technology in such a short period of time. This quantity represents almost 8 microcomputers in each of the nearly 82,000 school buildings using them. See table 8 below.

TABLE 8 MICROCOMPUTER NATIONAL INVENTORY
ALL U.S. SCHOOLS, 1984

| | SCHOOLS USING MICRO | NO. OF* MICROS | NO. OF MICROS PER BUILDING |
|---|---|---|---|
| Public (Fall, 84) | 69,003 | 569,825 | 8.3 |
| Catholic (March, 84) | 5,995 | 28,427 | 4.7 |
| Non-Catholic Private (March, 84) | 6,936 | 33,731 | 4.9 |
| Total | 81,934 | 631,983 | 7.7 |

*Projected; see Methodology

Almost 570,000 microcomputers are now used by the 69,003 public schools using microcomputers. The average number in each building is 8.3 units. Table 9 below shows the distribution by grade level.

TABLE 9 PUBLIC SCHOOLS NUMBER OF COMPUTERS BY SCHOOL TYPE: FALL 1984

| School Type | No.of Buildings | No.of* Micros | No. of Micros Per Building |
|---|---|---|---|
| Elementary | 41,901 | 215,393 | 5.1 |
| Jr. High School | 9,114 | 100,331 | 11.0 |
| Sr. High School | 14,340 | 228,726 | 16.0 |
| K-12/Special | 3,648 | 25,375 | 7.0 |
| Total | 69,003 | 569,825 | 8.3 |

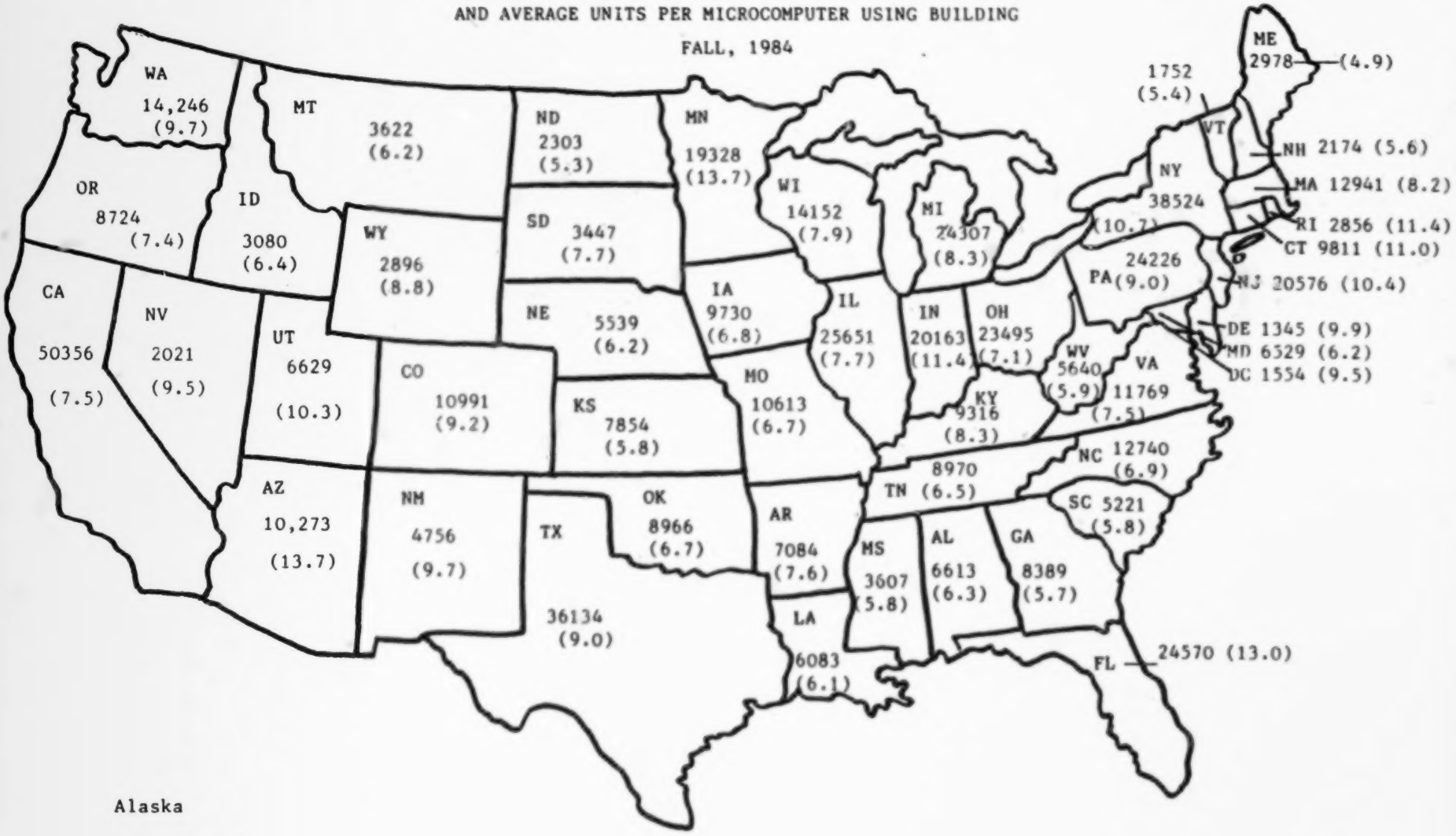
* Projected; see Methodology, Appendix D

Secondary schools are the prime users with senior highs having an average of 16 per building and junior highs 11. Elementary schools have 5.1. This is partly a function of the size of the school; secondary schools tend to be larger than elementary schools.

Map 3 shows an inventory of microcomputers in public schools by state with the average per building in each. For the sake of comparison, the average per building (U.S. total) in the Fall of 1983 was 5.8. In the State Rankings section, states are shown in order of the number of microcomputers installed. See Appendix A.

MAP 3

PROJECTED NUMBER OF MICROS, ALL PUBLIC SCHOOLS
AND AVERAGE UNITS PER MICROCOMPUTER USING BUILDING
FALL, 1984




Alaska
3827 (10.5)

Hawaii
705 (4.5)

U.S. Total: 569825 (8.3)

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Tables 10 and 11 examine the distribution of microcomputers in Catholic schools and non-Catholic private schools. Catholic schools using micros have an average of 4.7 per building and other private schools 4.9, compared to the 8.3 in public schools. The same relationship between grade level applies; i.e., secondary schools have two to three times as many micros per building as elementary schools.

TABLE10 CATHOLIC SCHOOLS
NUMBER OF COMPUTERS BY SCHOOL TYPE: MARCH 1984

| SCHOOL TYPE | BUILDINGS USING MICROS | NO. OF MICROS | NO. OF MICROS PER BUILDLING |
|---|---|---|---|
| Elementary | 4,636 | 15,863 | 3.4 |
| Jr. High | 57 | 190 | 3.3 |
| Sr. High | 1,232 | 11,957 | 9.7 |
| K-12/Special | 70 | 417 | 6.0 |
| Total | 5,995 | 28,427 | 4.7 |

TABLE 11 NON-CATHOLIC PRIVATE SCHOOLS
NUMBER OF COMPUTERS BY SCHOOL TYPE; MARCH 1984

| SCHOOL TYPE | BUILDINGS USING MICROS | NO. OF MICROS | NO. OF MICROS PER BUILDING |
|---|---|---|---|
| Elementary | 3,706 | 13,400 | 3.6 |
| Jr. High | 38 | 230 | 6.1 |
| Sr. High | 748 | 6,036 | 8.1 |
| K-12/Special | 2,444 | 14,065 | 5.8 |
| Total | 6,936 | 33,731 | 4.9 |

Table 12 examines the number of micros per building by the enrollment size of the buildings for each of the three types of schools. The higher average per school advantage held by public schools is partly a function of their larger average size. At all but the very smallest schools, the private non-Catholic schools are the heaviest micro users, followed by the public schools, with the Catholic schools maintaining the fewest micros per building. Since both the Catholic and private school surveys reflect earlier data, this table no doubt masks an even wider advantage held by private schools and overstates somewhat the relatively poor showing of the Catholic schools.

TABLE 12 AVERAGE MICROS PER BUILDING BY ENROLLMENT

| Enrollment | Public | Private | Catholic |
|---|---|---|---|
| Under 100 | 3.2 | 2.3 | 2.1 |
| 100-199 | 4.2 | 3.8 | 2.9 |
| 200-299 | 5.4 | 5.7 | 3.4 |
| 300-499 | 6.4 | 8.4 | 4.8 |
| 500-999 | 9.5 | 12.3 | 8.0 |
| 1000+ | 20.1 | 21.8 | 17.7 |
| Total | 8.3 | 4.9 | 4.7 |

Table 13 below compares the distribution of micros in public schools in Fall 1983 with Fall 1984. The number of microcomputers in use jumped by 245,439 or 75.7% in one year. The explosive growth occurred across all grades with the highest growth not surprisingly in elementary schools (where the largest increase in new users was also found). Over 100,000 additional microcomputers were installed in one year in public elementary schools alone.

TABLE 13

PUBLIC SCHOOLS
INCREASE IN MICROS BY SCHOOL TYPE
FALL '83 TO FALL '84

| School Type | Number of Micros Fall '83 | Fall '84 | Increase | % Increase | Per Building '84 |
|---|---|---|---|---|---|
| Elementary | 114,548 | 214,393 | 100,845 | 88.0 | 5.1 |
| Jr High School | 57,734 | 100,331 | 42,597 | 73.8 | 11.0 |
| Sr High School | 138,576 | 228,726 | 90,150 | 65.1 | 16.0 |
| K-12/Special | 13,528 | 25,375 | 11,847 | 87.6 | 7.0 |
| Total | 324,386 | 569,825 | 245,439 | 75.7 | 8.3 |

The additional computers were installed in schools buying their first computer and also in schools adding to their available machines. Consequently, the average number of micros available in each building rose at a slower rate than the increase in the number of available machines. The growth is still impressive. In elementary schools the average increased from 3.6 to 5.1; in junior highs from 7.3 to 11.0 and in senior highs from 10.6 to 16.0.

Table 14 examines the distribution of microcomputers by poverty level in public schools using microcomputers. Though the poverty gap in the proportion of schools using computers is closing, a quantitative gap is still apparent. There is a clear relationship between the wealth of the community and the number of microcomputers available in the schools. Schools in the wealthiest districts, 0-4.9% poverty, have an average of 10.6 micros while those in the poorest have only 6.8. In other words, the richest schools on average have 50% more computers than the poorest.

As was seen earlier, a larger percentage of "rich" schools than "poor" also use microcomputers. This means that a higher proportion of rich schools make micros available to students than do poor schools, and compared to the poor schools that make micros available, the rich schools offer 50% more units.

TABLE 14 NUMBER OF COMPUTERS BY POVERTY LEVEL: FALL, 1984
U.S. PUBLIC SCHOOLS

| Poverty Level | Buildings W/Micros | Buildings Reporting | Number of Micros | Micros Per Building |
|---|---|---|---|---|
| 0-4.9% | 9,866 | 7,794 | 82,353 | 10.6 |
| 5-11.9% | 22,890 | 19,781 | 162,081 | 8.2 |
| 12-24.9% | 26,339 | 22,935 | 176,752 | 7.7 |
| 25%+ | 8,978 | 6,872 | 46,812 | 6.8 |
| Total* | 69,003 | 58,817 | 481,299 | 8.2 |

* Includes schools not classified by poverty level

Table 15 raises concern that this situation may be worsening. It compares the number of micros per building in Fall 1983 to Fall 1984 by poverty level. In the Fall of 1983, there was a clear bias in favor of the low poverty schools. Low poverty (rich) schools averaged 7.2 micros per building compared to 5.0 in high poverty schools. In the Fall of 1984, rich schools averaged 10.6 while poor were 6.8.

Column 3 shows the average unit increase per building at each poverty level. The average in rich schools increased by 3.4 micros while in poor schools by 1.8, an almost 2 to 1 ratio. While in Fall 1983 rich schools had 2.2 or 44% more micros than poor schools, in Fall 1984, the gap grew to 3.8 micros or 56% more. Not only does there appear to be a gap, but the gap appears to be widening as the richer schools add computers at a faster rate (and at a faster growth rate) than the poor schools.

TABLE 15 NUMBER OF MICROS PER BUILDING BY POVERTY LEVEL U.S. PUBLIC SCHOOLS, FALL 1983 AND 1984

| Poverty Level* | (1) Number of Micros per Building Fall 1983 | (2) Fall 1984 | (3) Increase | (4) Rate of Increase |
|---|---|---|---|---|
| 0 - 4.9% | 7.2 | 10.6 | 3.4 | 47.2% |
| 5 - 11.9% | 5.7 | 8.2 | 2.5 | 43.9% |
| 12 - 24.9% | 5.6 | 7.7 | 2.1 | 37.5% |
| 25% + | 5.0 | 6.8 | 1.8 | 36.0% |
| Total** | 5.8 | 8.2 | 2.4 | 41.4% |

**Includes schools not classified by poverty level
*Figures for Fall 1983 based on 1970 census and for Fall 1984 on 1980 Census.

One note of caution. As explained earlier (also in Methodology, Appendix C), the Fall 1984 data reflects the 1980 census while the Fall 1983 data uses the 1970 census. The census classification affects which schools fall in which poverty classes. It is our belief that relatively little shift has occurred; however, if a significant shift did occur the change and rate of change, columns 3 and 4, may not be valid. Even so, the Fall 1984 data shows a significant bias; the only question would remain as to whether it is worsening or not.

The next chapter examines another measure of microcomputer accessibility, the ratio of student per computer in buildings using microcomputers.

IV

## STUDENT ACCESS AND MICRO-INTENSITY

This section of the report looks at the relationship between enrollment and microcomputers in order to address the issue of student access. Table 16 summarizes U.S. school enrollments and microcomputers in use for public, private, and Catholic schools.

TABLE 16 ENROLLMENT AND MICROCOMPUTERS IN U.S. SCHOOLS*, 1984

| | Enrollment | No. of Micros | Enrollment/Micros |
|---|---|---|---|
| Public | 40,474,709 | 569,825 | 71.0 |
| Private | 2,239,102 | 33,731 | 66.4 |
| Catholic | 3,010,066 | 28,427 | 105.9 |
| Total U.S. | 45,723,877 | 631,983 | 72.3 |

*Timing of surveys varies; see Methodology

The chart shows total school enrollment regardless of whether the schools use microcomputers, and the microcomputer count from schools which do. At this level there are 72.3 students for every microcomputer in all schools, a level that can be considered to provide very little access. Private schools provide more access and Catholic schools less than public schools.

This chart, however, does not address the issue of accessibility in buildings using microcomputers. We have seen earlier that a greater proportion of public schools than private or Catholic schools use microcomputers and that within public schools rich schools have more micros than poor schools. Catholic schools are starting to use micros faster than non-Catholic private schools. This chapter will examine the potential for student access provided by schools using microcomputers through Micro-Intensity. Micro-Intensity is the school enrollment divided by the microcomputers available for instruction and therefore is only available to measure schools that are using microcomputers.

A year ago when Micro-Intensity was first used as a measure (Microcomputers in Schools, 1983-84, A Comprehensive Survey and Analysis), the national public school ratio was 92.3 students per computer, and there were still 25,000 public schools, about 30% of the total, that didn't use microcomputers at all.

By Fall 1984, the number of public schools without computers had fallen to about 12,000. Micro-Intensity in the other 69,000 public schools had fallen to 63.5. The drop from 92.3 to 63.5 students per computer is especially significant considering an additional 13,000 schools became microcomputer users during the same period.

Map 4 shows public school Micro-Intensity by state. The leading states are Alaska (24.1), South Dakota (33.2), Minnesota (35.8), Wyoming (37.1), and Montana (41.0). Only 6 states, Hawaii, Maryland, Louisiana, Mississippi, Georgia, and South Carolina show poorer Micro-Intensity than last years national average of 92.3. Maps 5,6, and 7 show Micro-Intensity each for public elementary schools, junior highs, and senior highs.

MAP 4

MICRO-INTENSITY: ALL PUBLIC SCHOOLS, FALL 1984

Alaska

24.1

Hawaii

180.5

U.S. Total: 63.5



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MAP 5

MICRO-INTENSITY PUBLIC ELEMENTARY SCHOOLS,: FALL 1984

U.S. Total: 79.3

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MAP 6 MICRO-INTENSITY: PUBLIC JUNIOR HIGH SCHOOLS, FALL 1984

Alaska
27.9

Hawaii
201.7

U.S. Total: 61.2



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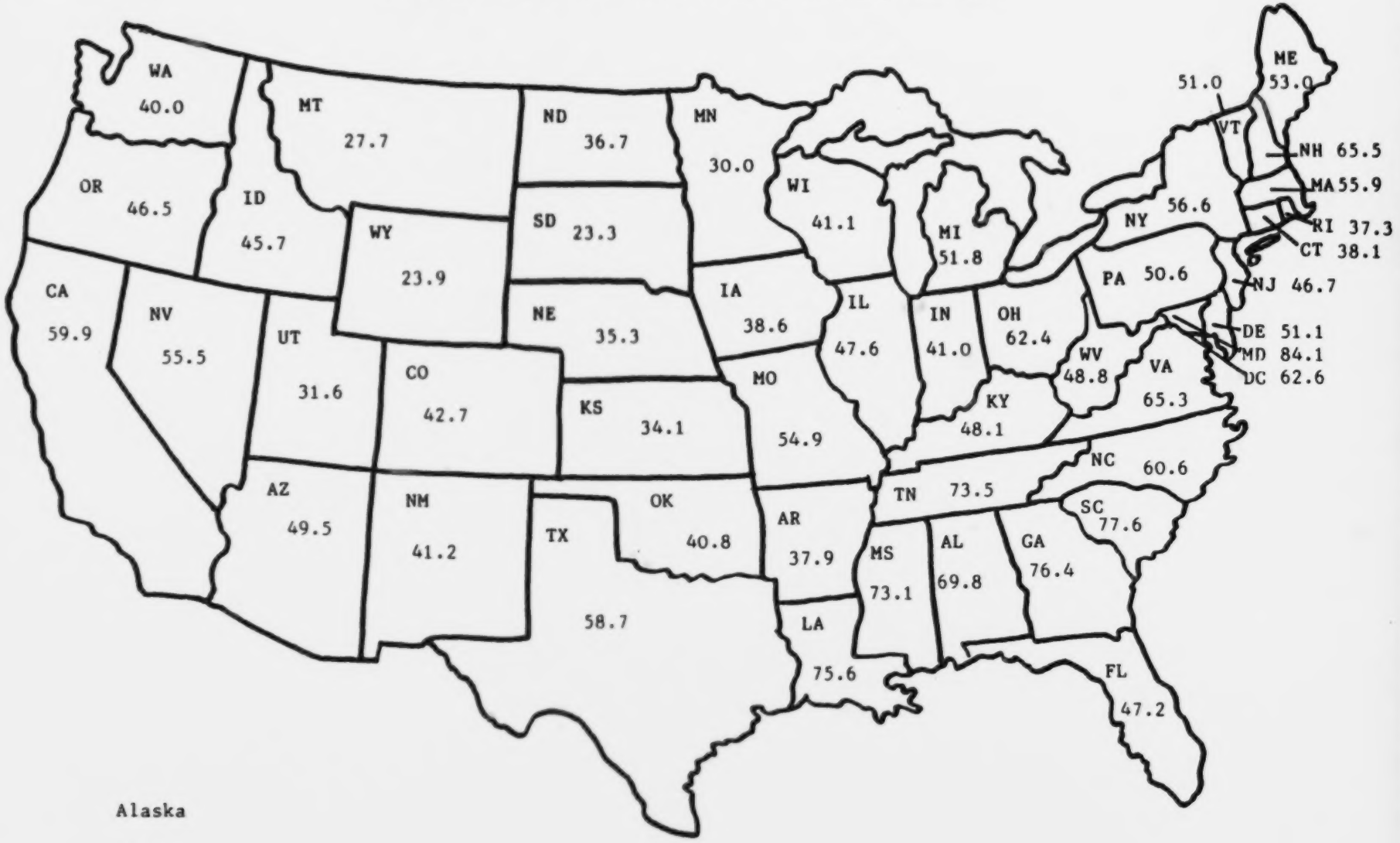
MAP 7

MICRO-INTENSITY: PUBLIC SENIOR HIGH SCHOOLS, FALL 1984




Alaska

26.0

Hawaii

150.7

U.S. Total: 51.5



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Like last year, senior highs have the best ratio (and the highest percent of computer use) with 51.5 students per computer. Junior high Micro-Intensity is 61.2 and elementary is 79.3. See Table 17.

TABLE 17 MICRO-INTENSITY BY GRADE LEVEL: FALL 1984
U.S. PUBLIC SCHOOLS

| School Type | Buildings W/Micros | Buildings Reporting | Enrollment of Buildings Reporting | Number of Micros | Micro Intensity |
|---|---|---|---|---|---|
| Elementary | 41,901 | 35,912 | 14,567,703 | 183,795 | 79.3 |
| Jr. High | 9,114 | 7,752 | 5,230,991 | 85,406 | 61.2 |
| Sr. High | 14,340 | 11,105 | 9,147,133 | 177,765 | 51.5 |
| K-12 | 2,653 | 2,359 | 886,673 | 19,365 | 45.8 |
| Total* | 69,003 | 58,817 | 30,559,835 | 481,299 | 63.5 |

*Column entries do not include Special Ed, Vocational Ed, or Adult Ed schools. The totals, however, do include all these schools.

Table 18 compares public school Micro-Intensity in Fall 1983 with Fall 1984 by grade level. The ratio has fallen from 92.3 to 63.5, a drop of 28.8 or 31.2%. The decline has happened uniformly across all grade levels. This means that Micro-Intensity in elementary schools lags behind the senior highs by virtually the same proportion as a year ago. This may well reflect the nature of the teaching applications at the different grades.

It is worth remembering that at the public elementary school level, 10,000 new school micro users were added during the year. Enough microcomputers were purchased by those and schools with existing micros to cause the ratio to drop by 29%. At the senior high level, only 1250 new micro using schools were added between Fall 1983 and Fall 1984.

TABLE 18

MICRO-INTENSITY COMPARED
U.S. PUBLIC SCHOOLS, FALL 1983 AND 1984

| | Micro-Intensity Fall 83 | Fall 84 | Change | % Change |
|---|---|---|---|---|
| Elementary | 112.4 | 79.3 | (33.1) | (29.4) |
| Jr. High | 92.3 | 61.2 | (31.1) | (33.7) |
| Sr. High | 76.6 | 51.5 | (25.1) | (32.8) |
| K-12 | 69.3 | 45.8 | (23.5) | (33.9) |
| Total | 92.3 | 63.5 | (28.8) | (31.2) |

As would be expected, there is a clear relationship between poverty level and Micro-Intensity. "Rich" public schools have one micro for every 54.4 students while poor ones have one for each 73.3. Table 19 shows that the ratio improves with each increase in relative wealth.

TABLE 19 MICRO-INTENSITY BY POVERTY LEVEL: FALL 1984

| Poverty Level | Bldgs W/Micros | Bldgs Reporting | Enrollment in Bldgs Reporting | Number of Micros | Micro-Intensity |
|---|---|---|---|---|---|
| (Rich) 0- 4.9% | 9,866 | 7,794 | 4,480,019 | 82,353 | 54.4 |
| 5-11.9% | 22,890 | 19,781 | 10,052,822 | 162,081 | 62.0 |
| 12-24.9% | 26,339 | 22,935 | 11,923,780 | 176,752 | 67.5 |
| (Poor) 25%+ | 8,972 | 6,872 | 3,430,505 | 46,812 | 73.3 |
| Total** | 69,003 | 58,817 | 30,559,835 | 481,299 | 63.5 |

** Includes schools not classified by poverty level

Note again that the Micro-Intensity measurement applies only when schools are using microcomputers; students in schools without microcomputers are excluded. Consequently, a better look compares both the percent of schools using micros and Micro-Intensity. See Table 20.

| TABLE 20 | PUBLIC SCHOOLS, FALL 1984 | |
|---|---|---|
| Poverty Level | % Schools Using Micros | Micro-Intensity |
| 0 - 4.9% (Rich) | 91.7 | 54.4 |
| 5.0 - 11.9% | 91.9 | 62.0 |
| 12.0 - 24.9% | 84.8 | 67.5 |
| 25+% (Poor) | 74.4 | 73.3 |

It's clear that as the poverty level goes up, a smaller proportion of the schools use microcomputers. And of those that do use microcomputers, the potential for student access decreases.

Table 21 compares Micro-Intensity in Fall 1983 with Fall 1984 by poverty level range. Again, bearing in mind the possibility of some distortion caused by the use of 1970 census data for Fall 1983 vs. 1980 census data used for Fall 1984, it appears that there is a growing bias in favor of rich schools. Not only do students in rich school districts have more access in absolute terms in Fall 1984, but the ratio of students per computer is declining at a faster rate, 32.7% for the rich compared to 24.6% for the poor.

The chart also shows, however, that the poorest schools in the Fall of 1984 were better off in terms of student access than the richest in the Fall of 1983 (73.3 students per computer compared to 80.8). Therefore, while there is an access lag and while it may be worsening, it appears that it is of less than one year's duration within micro-using schools. The lag in access among those schools still without computers is, of course, unmeasurable. See Table 21.

TABLE 21 MICRO-INTENSITY BY POVERTY LEVEL
U.S. PUBLIC SCHOOLS, FALL 1983 AND 1984

| | Fall 1983* | Fall 1984* | Change | % Change |
|---|---|---|---|---|
| 0-4.9% (rich) | 80.8 | 54.4 | (26.4) | (32.7) |
| 5.0-11.9% | 94.7 | 62.0 | (32.7) | (34.5) |
| 12.0-24.9% | 95.7 | 67.5 | (28.2) | (29.5) |
| 25+% (poor) | 97.2 | 73.3 | (23.9) | (24.6) |
| Total** | 92.3 | 63.5 | (28.8) | (31.2) |

*Fall 1983 based on 1970 census, Fall 1984 on 1980 census
**Includes schools not classified by poverty level

Micro-Intensity in Catholic and Private Schools

TABLE 22 MICRO-INTENSITY BY GRADE LEVEL
U.S. CATHOLIC SCHOOLS; MARCH 1984

| Grade level | Buildings W/Micro | Buildings Reporting | Enrollment of Bldgs. Reporting | No. of Micro | Micro-Intensity |
|---|---|---|---|---|---|
| Elementary | 4,636 | 4,447 | 1,295,515 | 15,216 | 85.1 |
| Secondary (Upper; Jr., Sr., K-12) | 1,271 | 1,193 | 648,269 | 11,210 | 57.8 |
| Total (includes special schools) | 5,995 | 5,670 | 1,948,017 | 26,517 | 73.5 |

Table 22 shows Micro-Intensity for Catholic schools as of March 1984. The data shows 85.2 students per computer in elementary schools and 57.8 in secondary schools for an overall ratio of 73.5. The elementary to secondary relationship is about the same as found in public schools.

TABLE 23 MICRO-INTENSITY BY GRADE LEVEL
U.S. PRIVATE NON-CATHOLIC SCHOOLS; MARCH 1984

| Grade level | Building w/Micro | Building Reporting | Enrollment of Bldgs. Reporting | No. of Micro | Micro-Intensity |
|---|---|---|---|---|---|
| Elementary | 3,706 | 3,359 | 518,593 | 12,145 | 42.7 |
| Secondary (Upper; Jr., Sr., K-12) | 2,775 | 2,369 | 639,255 | 15,944 | 40.1 |
| Total (includes special schools) | 6,936 | 6,079 | 1,185,375 | 29,278 | 40.5 |

Table 23 shows the same data for private non-Catholic schools as of March 1984. There are 42.7 students per computer at elementary schools and 40.1 at secondary schools for an overall ratio of 40.5. Even though we have seen earlier that private schools lag in adopting microcomputers, they lead both Catholic and public schools in providing access in the schools where they are used.

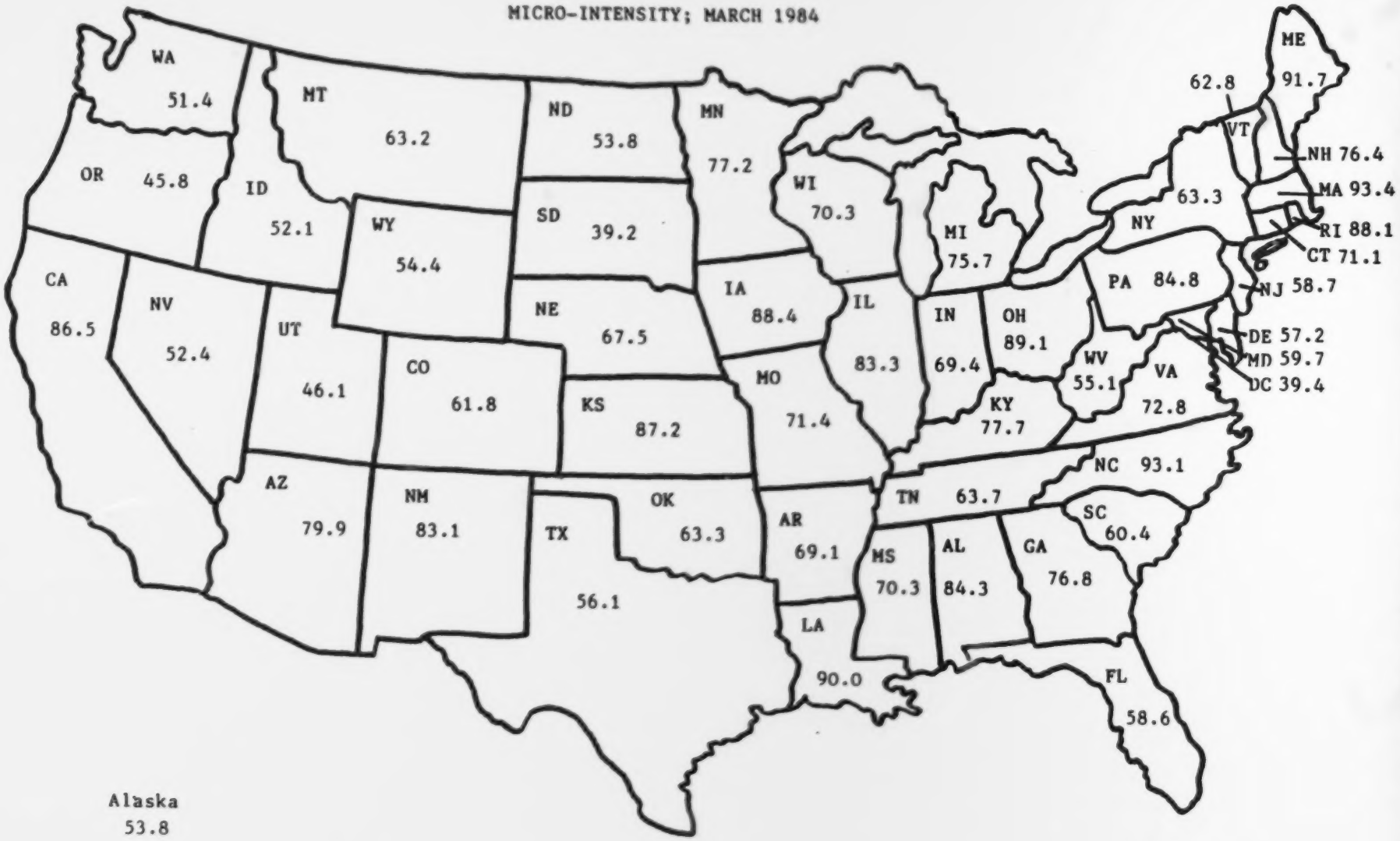
About three fourths of private secondary schools are actually K-12 schools. Since our surveys inventory computers at each building, it is impossible to attribute use to grade levels. This accounts for the relatively even ratios between elementary and secondary private schools when compared to public and Catholic schools.

Maps 8 and 9 show Micro-Intensity by state for Catholic and private schools respectively. Generally speaking, the geographical variances follow the public school pattern with the north central states being leaders and the deep south lagging. The relative private school advantage tends to hold across the country with only four states, Alaska, Arkansas, Oklahoma, and Minnesota, providing better access through the public school systems than available at the private schools in those states.

MAP 8

U.S. CATHOLIC SCHOOLS

MICRO-INTENSITY; MARCH 1984




U.S. Total: 73.5



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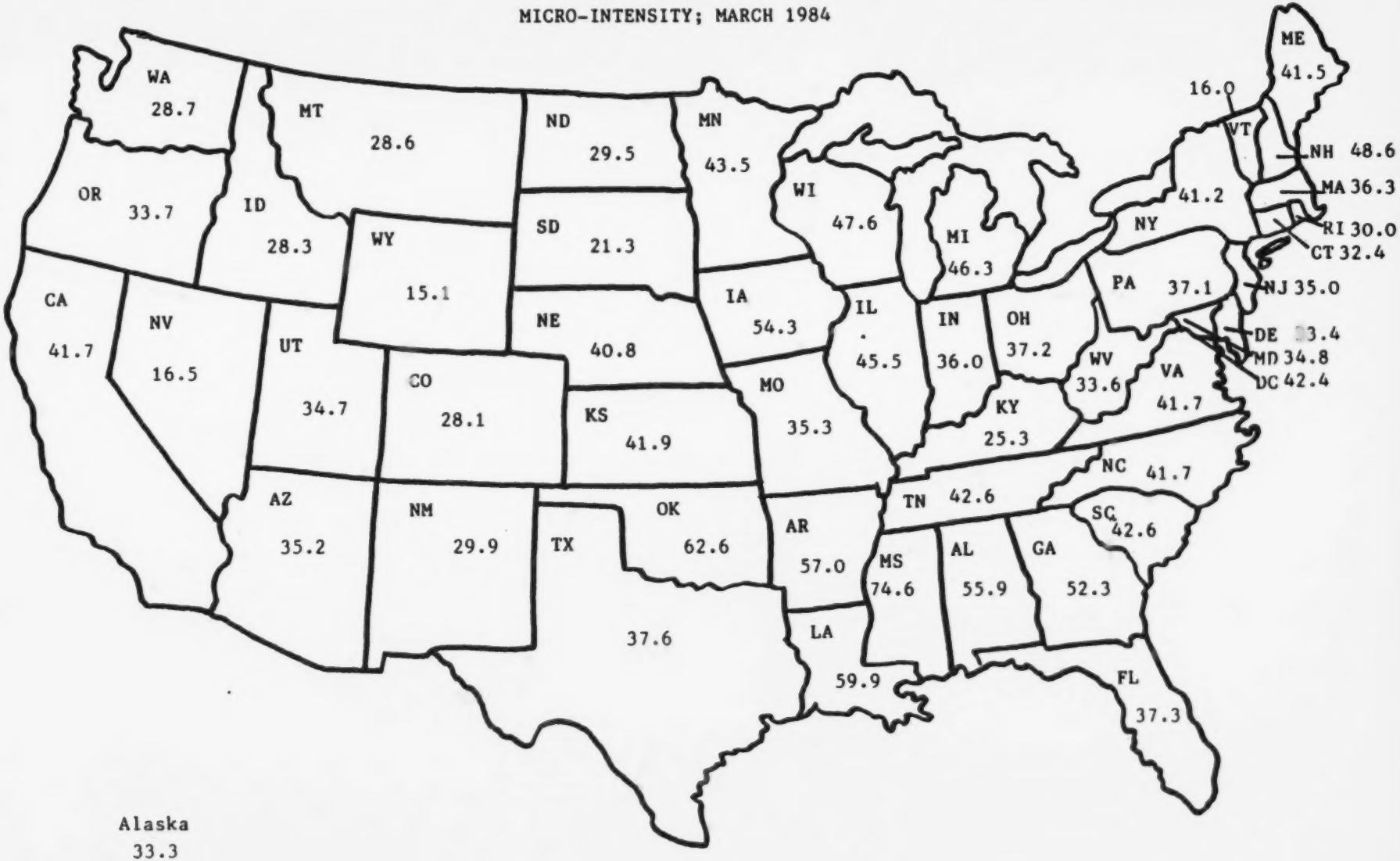
MAP 9

# U.S. PRIVATE NON-CATHOLIC SCHOOLS

## MICRO-INTENSITY; MARCH 1984




Alaska
33.3

Hawaii
52.8

U.S. Total 40.5





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TABLE 24

MICRO-INTENSITY
PUBLIC-PRIVATE SCHOOL COMPARISON

| Elementary | Public | Private | Catholic |
|---|---|---|---|
| Micro-Intensity | 79.3 | 42.7 | 85.1 |
| Secondary | | | |
| Micro-Intensity | 54.0 | 40.1 | 57.8 |
| All Schools | | | |
| Micro-Intensity | 63.5 | 40.5 | 73.5 |

* Includes Special, Adult & Vocational Schools
** Timing of data varies - see Methodology

Table 24 compares public, private, and Catholic school Micro-Intensity by grade level and overall. The leadership of private schools is apparent with 50% fewer students per computer than in public schools. Catholic schools are shown to lag slightly behind the public schools. Again, the timing of the surveys would indicate that private schools lead by an even greater margin and that Catholic schools lag behind public by less, if by any, margin.

Table 25 shows public, private and Catholic school Micro-Intensity by metro class. In public schools, the less dense the population, the better access students have to microcomputers. This relationship probably stems from the smaller enrollments in rural and suburban schools (1). That relationship is less pronounced in Catholic schools and not at all evident in private schools where equal levels of access are available regardless of population density.

TABLE 25 MICRO-INTENSITY BY METRO CLASS ALL U.S. SCHOOLS*

| Metro Class | Public | Private | Catholic |
|---|---|---|---|
| Urban | 72.4 | 40.6 | 75.6 |
| Suburban | 64.7 | 40.9 | 73.7 |
| Rural | 54.9 | 39.7 | 66.3 |
| Total** | 63.5 | 40.5 | 73.5 |

*Survey timing varies; see Methodology
**Includes buildings not classified by Metro Class

(1)A clear relationship showing improved Micro-Intensity as enrollment decreased was identified in last year's analysis, Microcomputers in Schools 1983-1984. It is likely that this relationship still exists.

Table 26 summarizes microcomputer use by the three measures discussed in this report: percent of schools using microcomputers, number of micros per building, and Micro-Intensity at public, private, and Catholic schools.

Public schools lead in the percent of schools using microcomputers and in the number per building, but lag behind private schools in student accessibility. Private schools show the least inclination to adopt microcomputers, but once the commitment is made, lead in providing access to students. Catholic schools approach public schools in initial use of microcomputers but lag both public and private schools in the level of student access provided.

TABLE 26

PUBLIC - PRIVATE COMPARISON
SUMMARY OF MICROCOMPUTER USE

| | Percent of Buildings Using Micros | Micros per Building | Micro-Intensity |
|---|---|---|---|
| Public | 85.1 | 8.3 | 63.5 |
| Private | 46.4 | 4.9 | 40.5 |
| Catholic | 63.4 | 4.7 | 73.5 |
| U.S. Total | 77.7 | 7.7 | 62.7 |

## MARKET SHARE ANALYSIS BY BRAND OF MICROCOMPUTER

TABLE 27 PROJECTED MICROCOMPUTER DISTRIBUTION BY BRAND: FALL 1984

| Brand | No. of Buildings | No. of Computers | Market Penetration By Building* | Market Penetration By No. of Computers |
|---|---|---|---|---|
| Apple | 47,099 | 290,000 | 68.3% | 50.9% |
| Radio Shack | 16,386 | 112,000 | 23.8% | 19.7% |
| Commodore | 12,179 | 86,400 | 17.7% | 15.2% |
| IBM | 2,398 | 19,800 | 3.5% | 3.5% |
| Other | 14,054 | 61,800 | 20.4% | 10.8% |

* Total more than 100% because many buildings contain more than one brand. See multi-brand users, Section VI.

Other includes: Acorn, Franklin, Atari, Texas Instruments, and others - none with greater than 3% market share.

Apple Computer is the most heavily used microcomputer brand in the K-12 school market. Fully two-thirds of all public schools using microcomputers have at least one Apple. Radio Shack, the second most widely used, is in about one quarter of public schools. Commodore follows being in 17.7% of schools. See Table 27.

The number of schools that use a particular brand is not the only way to look at brand distribution. Many schools have more than one brand (see next section).

Table 27 also shows the distribution of microcomputer units. With 290,000 units installed, Apple has a 50.9% market share of all micros in public schools. Apple is followed by Radio Shack, 112,000 (19.7%) and Commodore 86,400 (15.2%). These three brands account for over 85% of all microcomputers used for instruction in public schools.

TABLE 28 CHANGE IN INSTALLED BASE BY BRAND FALL 1983 TO FALL 1984, PUBLIC SCHOOLS

| | 1984 | 1983 | Increase | Percent Increase |
|---|---|---|---|---|
| Apple | 290,000 | 160,500 | 129,500 | 80.7 |
| Radio Shack | 112,000 | 68,200 | 43,800 | 64.2 |
| Commodore | 86,400 | 49,500 | 36,900 | 74.5 |
| IBM | 19,800 | 8,000 | 11,000 | 125.0 |
| Other/Unknown | 61,800 | 38,000 | 23,800 | 62.6 |
| Total | 570,000 | 325,000 | 245,000 | 75.4 |

Table 28 is a comparison of installed microcomputers by brand in Fall 1983 and Fall 1984. There was an increase of 245,000 or 74.5%, from 325,000 to 570,000. Needless to say, that is exceptional growth. It benefited all brands with Apple showing the largest increase, 129,500 units. IBM, however, showed the largest rate of increase, 125.0%. Apple had the second highest rate of increase. Apple's unit market share increased from 49.4% in Fall 1983 to 50.9% in Fall 1984. Radio Shack declined from 21.0% to 19.7% and Commodore held even at 15.2%. IBM, with the biggest growth rate, moved to 3.5% market share.

TABLE 29 COMPUTERS PER BUILDING BY BRAND: FALL 1983 AND 1984
PUBLIC SCHOOLS

| | 1983 | 1984 |
|---|---|---|
| Apple | 4.3 | 5.9 |
| Commodore | 5.7 | 6.8 |
| IBM | 7.5 | 8.0 |
| Radio Shack | 5.1 | 6.6 |
| Other | 4.6 | 8.2 |

Table 29 compares the average number of computers of each brand in buildings in which they are present with the same data in the prior year. Here IBM leads as it did in the Fall of 1983. However, the other brands are closing the gap on IBM. Apple trails by this measure, no doubt because of the large number of schools using some Apples.

Table 30 looks at brand useage by the grade level of schools. Apple and Commodore are used by essentially the same proportion of schools whether elementary or secondary. Radio Shack and IBM both are used more heavily in secondary schools, Radio Shack by about 2 to 1, IBM by about 5 to 1. Figures are shown for both Fall 1983 and Fall 1984.

TABLE 30 BRAND NAME BY GRADE LEVEL: PERCENT USING MICROS

PUBLIC SCHOOLS

| | Elementary | | Junior High School | | Senior High School | | All Schools | |
|---|---|---|---|---|---|---|---|---|
| | 1983 | 1984 | 1983 | 1984 | 1983 | 1984 | 1983 | 1984 |
| Apple | 68.6% | 67.6% | 65.9% | 67.6% | 65.0% | 69.8% | 67.1% | 68.3% |
| Radio Shack | 17.2% | 17.3% | 28.6% | 29.1% | 37.4% | 39.0% | 23.8% | 23.8% |
| Commodore | 15.5% | 17.2% | 17.3% | 19.9% | 15.2% | 17.9% | 15.7% | 17.7% |
| IBM | 1.2% | 1.7% | 1.3% | 2.6% | 4.3% | 9.3% | 2.1% | 3.5% |

TABLE 31

PERCENTAGE
BRAND DISTRIBUTION BY PUBLIC
SCHOOL DISTRICT POVERTY LEVEL: FALL 1984

| Poverty Level | US Pub. Schools | US Pub. Schools w/Micros | Apple | Radio Shack | Commodore | IBM |
|---|---|---|---|---|---|---|
| 0-4.9% (rich) | 13.3 | 14.3 | 15.2 | 12.3 | 16.1 | 13.5 |
| 5.0-11.9% | 30.7 | 33.2 | 34.5 | 29.7 | 35.0 | 27.4 |
| 12.0-24.9% | 38.3 | 38.2 | 37.8 | 42.9 | 35.8 | 36.3 |
| 25+% (poor) | 14.9 | 13.0 | 11.3 | 14.2 | 12.4 | 20.9 |
| Unclassified | 2.8 | 1.4 | 1.3 | 0.8 | 0.7 | 1.9 |

Table 31 looks at the distribution of schools using each brand of microcomputer and the distribution of schools by poverty level. Apple and Commodore reflect the distribution of all microcomputer using schools; in Apple's case that is due, no doubt, to their very wide distribution. Radio Shack shows a slight bias away from the richer schools and towards the 12.0 to 24.9% bracket. IBM shows a marked bias towards "poor" schools, the 25%+ poverty level category.

Although Apple is the market leader in both private and Catholic schools, it is not nearly as dominant as in public schools. In Catholic schools Apple has a 33.0% unit market share compared to 26.3% for Radio Shack and 22.8% for Commodore. In private schools Apple holds 39.4% market share compared to 18.7% for Commodore and 17.8% for Radio Shack. IBM holds about a 2% share in each. See tables 32 and 33.

TABLE 32

CATHOLIC SCHOOLS
UNIT MARKET SHARE, MARCH 1984

| Brand | Units | % |
|---|---|---|
| Apple | 9,384 | 33.0 |
| Radio Shack | 7,476 | 26.3 |
| Commodore | 6,482 | 22.8 |
| IBM | 571 | 2.0 |
| Other | 4,514 | 15.9 |
| Total | 28,427 | 100.0 |

| TABLE 33 | PRIVATE NON-CATHOLIC SCHOOLS<br>UNIT MARKET SHARE, MARCH 1984 | |
|---|---|---|
| Brand | Units | % |
| Apple | 13,307 | 39.4 |
| Radio Shack | 5,995 | 17.8 |
| Commodore | 6,308 | 18.7 |
| IBM | 638 | 1.9 |
| Other | 7,483 | 22.2 |
| Total | 33,731 | 100.0 |

Table 34 summarizes market share percentages in public, private, and Catholic schools for the major brands.

| TABLE 34 | UNIT MARKET SHARE BY BRAND | | |
|---|---|---|---|
| | Public | Private | Catholic |
| Apple | 50.9% | 39.4% | 33.0% |
| Radio Shack | 19.7% | 17.8% | 26.3% |
| Commodore | 15.2% | 18.7% | 22.8% |
| IBM | 3.5% | 1.9% | 2.0% |
| Other | 10.8% | 22.2% | 15.9% |

VI

## SCHOOLS WITH MULTIPLE BRANDS OF COMPUTERS

Almost a third of all microcomputer using schools now use more than one brand of microcomputer. Almost half of public senior high schools use mutiple brands. See Table 35. This chart looks at the public school universe by grade level and shows the relationship between all schools, schools using microcomputers, and schools using multiple brands. Multiple brands are mostly in senior highs which were the leading schools in the micro revolution and which currently contain the most units. Not surprisingly, elementary schools, which were last to begin using micros and which contain the fewest per building, have the least incidence of multi-brand installations. Nevertheless, 24% of elementary schools using micros have more than one.

TABLE 35

PUBLIC SCHOOLS WITH MULTIPLE BRANDS OF COMPUTERS: FALL 1984

| | Universe | Micro Users | Micro Users With Multiple Brands | % To Micro Users |
|---|---|---|---|---|
| Elementary | 51,277 | 41,901 | 10,045 | 24.0 |
| Junior High | 9,846 | 9,114 | 3,115 | 34.2 |
| Senior High | 15,211 | 14,340 | 6,708 | 46.8 |
| K-12 | 2,857 | 2,653 | 1,071 | 40.4 |
| Special Ed. | 2,315 | 995 | 157 | 15.8 |
| Total | 81,506 | 69,003 | 21,096 | 30.6 |

Table 36 shows the change in multi-brand use from Fall 1983 to Fall 1984. It increased across all grade ranges, roughly proportionally. While one would logically think that schools would commit to one brand for simplicity, software interchange, or compatibility, apparently there are compelling reasons for them to diversify. It may be that the rise and fall of various manufacturers has caused schools to move to the most prominent brands to protect their investment. That would have caused schools using Franklins, Ataris, Texas Instruments, and others to supplement their stock with Apples, Radio Shacks and Commodores. Also, at the onset of the rush to install microcomputers, many schools accepted donations of any type of microcomputer to get started. Most school districts have moved towards more formal evaluations and centralized purchasing as their investments in computers and software have grown. These evaluations may have caused the schools to switch to new brands.

TABLE 36 PUBLIC SCHOOLS WITH MULTIPLE BRANDS FALL 1983 AND 1984

| | Multibrand Percentage | |
|---|---|---|
| | Fall 1983 | Fall 1984 |
| Elementary | 14.0 | 24.0 |
| Jr. High | 21.6 | 34.2 |
| Sr. High | 27.3 | 46.8 |
| K - 12 | 24.8 | 40.4 |
| Special Ed. | 7.3 | 15.8 |
| Total | 18.6 | 30.6 |

Again, not surprisingly, the wealthy schools, which were the first to use micros and which have the most, tend to have the highest incidence of multiple brand use. See Table 37. However, the gap between rich and poor schools in this instance is narrow - 32.9% of "rich" and 27.4% of "poor" microcomputer using schools have multiple brands.

TABLE 37 MULTI-BRAND USERS BY POVERTY CLASS: FALL 1984
PUBLIC SCHOOLS WITH MICROCOMPUTERS

| | Rich | | | Poor |
|---|---|---|---|---|
| | 0-4.9% | 5-11.9% | 12-24.9% | 25+% |
| All Schools | | | | |
| Using Micros | 9,866 | 22,890 | 26,339 | 8,978 |
| W/Multi-Brands | 3,241 | 7,100 | 8,095 | 2,463 |
| % | 32.9 | 31.0 | 30.7 | 27.4 |

## CONCLUSION

The school market for microcomputers is large and growing. Schools are buying and installing microcomputers at tremendous rates. With annual increases in installations from 60% to over 100%, each major manufacturer's sales are booming. Software suppliers, peripherals manufacturers, and other ancillary suppliers are benefiting as well.

There appears to be plenty of room for growth. If all schools were to use computers at the Micro-Intensity ratio of 40.5 currently achieved by private schools, 500,000 more microcomputers would have to be installed. Many educators agree that this ratio is still not nearly low enough.

This report has shown that private schools provide the best access among schools that use microcomputers. The next sector having high levels of access are public schools in rich districts. Schools in poorer school districts and Catholic schools lag, but by less than one year's duration. Computer use in all schools which use them is intensifying. Obviously the computer assisted instruction phenomenon is still very dynamic. As most schools move quickly forward, one must wonder about the 23,000 schools that still do not have even one computer, and the many more that may have an underutilized token microcomputer.

Microcomputers would not have been installed in such increasing quantities if they were not known to provide significant benefits. Educators measure those benefits in terms of how students accept the microcomputers and the amount of learning stimulus they provide. Studies like this, which show the relative potential for student access and national trends in installations, lack from the ability to compare to an accepted national standard for the proper level of access. Policy makers are left knowing where we stand in terms of micro access in our schools, but not where we should be standing.

For microcomputers to assume their proper place in the spectrum of educational tools, a concensus must be reached not only of their effectiveness at varying grade levels and for various applications but also the level of student exposure required to aid the instructional process. With a proper standard, school systems, educators and government officials will be able to measure accurately the condition of all schools to make an assessment of where our schools stand in comparison.

## Appendices

A. State Rankings

B. State Profiles

C. Survey Methodology and Definitions

APPENDIX A

## STATE RANKINGS

State Rankings show states ranked by the statewide percentage of districts and schools using microcomputers in instruction, the number of computers used in each state and the Micro-Intensity or potential for student access within all microcomputer-using schools in the state.

The rankings are preceded by a summary ranking showing the relative position of each state by each measure.

The percent of district and school microcomputer usage are results of our surveys which reached all school districts.

The quantity of microcomputers are state-by-state projections based upon the percent of schools reporting quantities projected to the total of schools with microcomputers in the state. The percent of schools reporting quantities (of schools using microcomputers) is shown on each state profile (Appendix B). See Methodology, Appendix C, for more information.

Micro-Intensity rankings are based on public schools of all grade levels within the state. Micro-Intensity by grade level is also shown for each. As explained in Methodology, Appendix C, Micro-Intensity is the actual ratio of enrollment to microcomputers used for instruction in schools using microcomputers. Average Micro-Intensity is developed only from schools reporting the quantity of computers, approximately the same percent of schools in each state as used in the microcomputer projection above. Since the sample is so large (85% over the U.S.), we assume the Micro-Intensities shown are valid measures of the potential for student access to microcomputers in each state.

STATE RANKING SUMMARY

| State | Percent Districts w/ Micros | Percent Schools w/ Micros | Number of Micros | Micro-Intensity |
|---|---|---|---|---|
| Alabama | 27 | 43 | 30 | 45 |
| Alaska | 51 | 36 | 37 | 1 |
| Arizona | 43 | 31 | 19 | 7 |
| Arkansas | 31 | 30 | 28 | 18 |
| California | 16 | 5 | 1 | 42 |
| Colorado | 19 | 2 | 17 | 12 |
| Connecticut | 32 | 14 | 20 | 9 |
| Delaware | 37 | 39 | 50 | 32 |
| District of Columbia | 45 | 16 | 49 | 22 |
| Florida | 33 | 11 | 5 | 25 |
| Georgia | 38 | 35 | 26 | 50 |
| Hawaii | 1 | 48 | 51 | 51 |
| Idaho | 34 | 17 | 41 | 30 |
| Illinois | 28 | 28 | 4 | 27 |
| Indiana | 8 | 8 | 10 | 10 |
| Iowa | 7 | 6 | 21 | 16 |
| Kansas | 9 | 10 | 27 | 17 |
| Kentucky | 17 | 37 | 22 | 36 |
| Louisiana | 25 | 50 | 32 | 46 |
| Maine | 47 | 34 | 42 | 35 |
| Maryland | 36 | 25 | 31 | 48 |
| Massachusetts | 39 | 20 | 14 | 26 |
| Michigan | 10 | 15 | 6 | 31 |
| Minnesota | 14 | 1 | 11 | 3 |
| Mississippi | 41 | 49 | 39 | 47 |
| Missouri | 40 | 41 | 18 | 38 |
| Montana | 49 | 33 | 38 | 5 |

| | Percent Districts w/ Micros | Percent Schools w/ Micros | Number of Micros | Micro-Intensity |
|---|---|---|---|---|
| Nebraska | 15 | 51 | 34 | 11 |
| Nevada | 2 | 46 | 47 | 34 |
| New Hampshire | 50 | 18 | 46 | 39 |
| New Jersey | 23 | 21 | 9 | 20 |
| New Mexico | 20 | 40 | 36 | 8 |
| New York | 22 | 12 | 2 | 37 |
| North Carolina | 11 | 9 | 15 | 44 |
| North Dakota | 44 | 22 | 45 | 14 |
| Ohio | 21 | 27 | 8 | 40 |
| Oklahoma | 46 | 45 | 24 | 23 |
| Oregon | 35 | 4 | 25 | 19 |
| Pennsylvania | 18 | 38 | 7 | 28 |
| Rhode Island | 3 | 23 | 44 | 6 |
| South Carolina | 29 | 42 | 35 | 49 |
| South Dakota | 30 | 47 | 40 | 2 |
| Tennessee | 12 | 32 | 23 | 43 |
| Texas | 42 | 44 | 3 | 33 |
| Utah | 4 | 3 | 29 | 24 |
| Vermont | 48 | 26 | 48 | 15 |
| Virginia | 24 | 19 | 16 | 41 |
| Washington | 26 | 13 | 12 | 13 |
| West Virginia | 5 | 29 | 33 | 29 |
| Wisconsin | 13 | 7 | 13 | 21 |
| Wyoming | 6 | 24 | 43 | 4 |

STATE RANKINGS

PERCENT OF PUBLIC SCHOOL DISTRICTS USING MICROCOMPUTERS

FALL 1984

| No. | State | Percent | No. | State | Percent |
|---|---|---|---|---|---|
| 1 (tie) | Hawaii | 100.0 | 28 | Illinois | 96.6 |
| 1 (tie) | Nevada | 100.0 | 29 | South Carolina | 96.5 |
| 1 (tie) | Rhode Island | 100.0 | 30 | South Dakota | 96.2 |
| 1 (tie) | Utah | 100.0 | 31 | Arkansas | 96.1 |
| 1 (tie). | West Virginia | 100.0 | 32 | Connecticut | 95.8 |
| 1 (tie). | Wyoming | 100.0 | 33 (tie) | Florida | 95.7 |
| 7 | Iowa | 99.8 | 33 (tie) | Idaho | 95.7 |
| 8 (tie) | Indiana | 99.4 | 35 | Oregon | 95.4 |
| 8 (tie) | Kansas | 99.4 | 36 | Maryland | 95.0 |
| 8 (tie) | Michigan | 99.4 | 37 (tie) | Delaware | 94.7 |
| 11 (tie) | North Carolina | 99.3 | 37 (tie) | Georgia | 94.7 |
| 11 (tie) | Tennessee | 99.3 | 39 | Massachusetts | 91.3 |
| 11 (tie) | Wisconsin | 99.3 | 40 | Missouri | 90.9 |
| 14 | Minnesota | 99.2 | 41 | Mississippi | 89.3 |
| 15 | Nebraska | 99.1 | 42 | Texas | 89.1 |
| 16 (tie) | California | 99.0 | 43 | Arizona | 88.6 |
| 16 (tie) | Kentucky | 99.0 | 44 | North Dakota | 87.6 |
| 16 (tie) | Pennsylvania | 99.0 | 45 | Dist. of Columbia | 87.5 |
| 19 (tie) | Colorado | 98.9 | 46 | Oklahoma | 82.2 |
| 19 (tie) | New Mexico | 98.9 | 47 | Maine | 79.9 |
| 21 | Ohio | 98.8 | 48 | Vermont | 77.2 |
| 22 | New York | 98.6 | 49 | Montana | 74.3 |
| 23 | New Jersey | 98.0 | 50 | New Hampshire | 72.6 |
| 24 | Virginia | 97.4 | 51 | Alaska | 69.8 |
| 25 | Louisiana | 97.2 | | | |
| 26 | Washington | 97.0 | | | |
| 27 | Alabama | 96.9 | U.S. TOTAL | | 85.1 |

Some states appear to tie due to rounding.

STATE RANKING

PERCENT OF PUBLIC SCHOOLS USING MICROCOMPUTERS

FALL 1984

| No. | State | Percent | No. | State | Percent |
|---|---|---|---|---|---|
| 1 | Minnesota | 98.3 | 28 | Illinois | 85.0 |
| 2 | Colorado | 96.7 | 29 | West Virginia | 84.9 |
| 3 | Utah | 96.1 | 30 | Arkansas | 84.0 |
| 4 | Oregon | 95.2 | 31 | Arizona | 83.3 |
| 5 | California | 93.4 | 32 | Tennessee | 83.2 |
| 6 | Iowa | 93.1 | 33 | Montana | 82.0 |
| 7 | Wisconsin | 93.0 | 34 | Maine | 81.2 |
| 8 | Indiana | 92.9 | 35 | Georgia | 80.8 |
| 9 | North Carolina | 92.6 | 36 | Alaska | 80.6 |
| 10 | Kansas | 90.7 | 37 | Kentucky | 80.4 |
| 11 | Florida | 90.3 | 38 | Pennsylvania | 80.1 |
| 12 (tie) | New York | 90.2 | 39 | Delaware | 80.0 |
| 12 (tie) | Washington | 90.2 | 40 | New Mexico | 79.5 |
| 14 | Connecticut | 89.4 | 41 | Missouri | 78.3 |
| 15 | Michigan | 89.3 | 42 | South Carolina | 77.5 |
| 16 | Dist. of Columbia | 88.7 | 43 | Alabama | 75.7 |
| 17 | Idaho | 87.8 | 44 | Texas | 74.9 |
| 18 | New Hampshire | 87.7 | 45 | Oklahoma | 74.7 |
| 19 | Virginia | 87.6 | 46 | Nevada | 74.5 |
| 20 | Massachusetts | 87.0 | 47 | South Dakota | 73.9 |
| 21 | New Jersey | 86.8 | 48 | Hawaii | 67.1 |
| 22 | North Dakota | 86.7 | 49 | Mississippi | 66.5 |
| 23 | Rhode Island | 86.5 | 50 | Louisiana | 65.5 |
| 24 | Wyoming | 86.4 | 51 | Nebraska | 61.3 |
| 25 | Maryland | 85.7 | | | |
| 26 | Vermont | 85.6 | | | |
| 27 | Ohio | 85.2 | U.S. TOTAL | | 85.1 |

Some states appear to tie due to rounding.

STATE RANKINGS

PROJECTED NUMBER OF MICROCOMPUTERS IN USE

PUBLIC SCHOOLS, FALL 1984

| No. | State | Quantity | No. | State | Quantity |
|---|---|---|---|---|---|
| 1 | California | 50,356 | 28 | Arkansas | 7,084 |
| 2 | New York | 38,524 | 29 | Utah | 6,629 |
| 3 | Texas | 36,134 | 30 | Alabama | 6,613 |
| 4 | Illinois | 25,651 | 31 | Maryland | 6,529 |
| 5 | Florida | 24,570 | 32 | Louisiana | 6.083 |
| 6 | Michigan | 24,307 | 33 | West Virginia | 5,640 |
| 7 | Pennsylvania | 24,226 | 34 | Nebraska | 5,539 |
| 8 | Ohio | 23,495 | 35 | South Carolina | 5,221 |
| 9 | New Jersey | 20,576 | 36 | New Mexico | 4,756 |
| 10 | Indiana | 20,163 | 37 | Alaska | 3,827 |
| 11 | Minnesota | 19,328 | 38 | Montana | 3,622 |
| 12 | Washington | 14,246 | 39 | Mississippi | 3,607 |
| 13 | Wisconsin | 14,152 | 40 | South Dakota | 3,447 |
| 14 | Massachusetts | 12,941 | 41 | Idaho | 3,080 |
| 15 | North Carolina | 12,740 | 42 | Maine | 2,978 |
| 16 | Virginia | 11,769 | 43 | Wyoming | 2,896 |
| 17 | Colorado | 10,991 | 44 | Rhode Island | 2,856 |
| 18 | Missouri | 10,613 | 45 | North Dakota | 2,303 |
| 19 | Arizona | 10,273 | 46 | New Hampshire | 2,174 |
| 20 | Connecticut | 9,811 | 47 | Nevada | 2,021 |
| 21 | Iowa | 9,730 | 48 | Vermont | 1,752 |
| 22 | Kentucky | 9,316 | 49 | Dist. of Columbia | 1,554 |
| 23 | Tennessee | 8.970 | 50 | Delaware | 1,345 |
| 24 | Oklahoma | 8,966 | 51 | Hawaii | 705 |
| 25 | Oregon | 8,724 | | | |
| 26 | Georgia | 8,389 | | | |
| 27 | Kansas | 7,854 | U.S. TOTAL | | 569,825 |

STATE RANKINGS

MICRO-INTENSITY OF PUBLIC SCHOOLS, FALL 1984

(Number of Students per Computer in Schools with Computers)

| Rank | State | Micro Intensity | Elemen. Micro-Intensity | Jr. High Micro-Intensity | Sr. High Micro-Intensity |
|---|---|---|---|---|---|
| 1 | Alaska | 24.1 | 29.9 | 27.9 | 26.0 |
| 2 | South Dakota | 33.2 | 42.8 | 49.5 | 23.3 |
| 3 | Minnesota | 35.8 | 44.3 | 34.9 | 30.0 |
| 4 | Wyoming | 37.1 | 48.3 | 40.9 | 23.9 |
| 5 | Montana | 41.0 | 56.1 | 51.8 | 27.7 |
| 6 | Rhode Island | 44.2 | 53.5 | 42.2 | 37.3 |
| 7 | Arizona | 45.8 | 50.6 | 32.4 | 49.5 |
| 8 | New Mexico | 46.1 | 50.7 | 47.7 | 41.2 |
| 9 | Connecticut | 48.1 | 59.3 | 45.9 | 38.1 |
| 10 | Indiana | 48.2 | 56.6 | 43.6 | 41.0 |
| 11 | Nebraska | 48.2 | 69.2 | 53.4 | 35.3 |
| 12 | Colorado | 48.4 | 54.1 | 51.8 | 42.7 |
| 13 | Washington | 48.4 | 57.1 | 51.5 | 40.0 |
| 14 | North Dakota | 48.6 | 83.8 | 56.8 | 36.7 |
| 15 | Vermont | 49.3 | 51.2 | 41.0 | 51.0 |
| 16 | Iowa | 49.9 | 72.4 | 46.7 | 38.6 |
| 17 | Kansas | 49.9 | 69.2 | 50.1 | 34.1 |
| 18 | Arkansas | 51.3 | 67.4 | 67.4 | 37.9 |
| 19 | Oregon | 51.3 | 60.8 | 43.2 | 46.5 |
| 20 | New Jersey | 53.9 | 59.4 | 52.3 | 46.7 |
| 21 | Wisconsin | 54.1 | 72.0 | 52.3 | 41.1 |
| 22 | Dist. of Columbia | 55.2 | 54.7 | 51.1 | 62.6 |
| 23 | Oklahoma | 57.0 | 78.4 | 80.3 | 40.8 |
| 24 | Utah | 57.9 | 89.2 | 56.5 | 31.6 |
| 25 | Florida | 59.7 | 72.3 | 62.4 | 47.2 |
| 26 | Massachusetts | 61.9 | 68.5 | 59.9 | 55.9 |
| 27 | Illinois | 62.0 | 82.5 | 50.8 | 47.6 |

| Rank | State | Micro-Intensity | Elemen. Micro-Intensity | Jr. High Micro-Intensity | Sr. High Micro-Intensity |
|---|---|---|---|---|---|
| 28 | Pennsylvania | 62.0 | 83.6 | 53.1 | 50.6 |
| 29 | West Virginia | 62.4 | 105.8 | 55.7 | 48.8 |
| 30 | Idaho | 62.7 | 74.5 | 72.3 | 45.7 |
| 31 | Michigan | 63.6 | 78.4 | 58.8 | 51.8 |
| 32 | Delaware | 63.7 | 93.8 | 60.8 | 51.1 |
| 33 | Texas | 64.0 | 75.3 | 58.3 | 58.7 |
| 34 | Nevada | 64.5 | 87.2 | 52.9 | 55.5 |
| 35 | Maine | 65.2 | 73.3 | 72.3 | 53.0 |
| 36 | Kentucky | 65.3 | 94.5 | 73.7 | 48.1 |
| 37 | New York | 65.3 | 78.3 | 65.3 | 56.6 |
| 38 | Missouri | 66.0 | 80.5 | 68.5 | 54.9 |
| 39 | New Hampshire | 66.7 | 65.7 | 76.0 | 65.5 |
| 40 | Ohio | 73.4 | 97.1 | 62.4 | 62.4 |
| 41 | Virginia | 80.0 | 104.8 | 71.3 | 65.3 |
| 42 | California | 81.2 | 102.5 | 70.5 | 59.9 |
| 43 | Tennessee | 82.5 | 97.6 | 68.1 | 73.5 |
| 44 | North Carolina | 83.8 | 108.0 | 82.4 | 60.6 |
| 45 | Alabama | 89.5 | 104.5 | 96.0 | 69.8 |
| 46 | Louisiana | 96.9 | 140.5 | 99.6 | 75.6 |
| 47 | Mississippi | 97.1 | 115.3 | 99.2 | 73.1 |
| 48 | Maryland | 98.6 | 119.9 | 105.2 | 84.1 |
| 49 | South Carolina | 105.6 | 128.6 | 148.8 | 77.6 |
| 50 | Georgia | 107.1 | 151.3 | 133.4 | 76.4 |
| 51 | Hawaii | 180.5 | 200.5 | 201.7 | 150.7 |

APPENDIX B

## STATE PROFILES

The state profiles following show a summary of data on each state detailed enough to make in-depth comparisons to U.S. national averages and other states. They will also enable readers to position any state as they read the text of the report.

The uppermost portion of each profile shows the address and phone number of the state department of education along with the names of the superintendent and state level microcomputer coordinators. In the upper right-hand corner, the state's rankings compared to other states are shown. States are ranked on percentage of districts and public schools using computers in instruction, the quantity of microcomputers in use and Micro-Intensity, the measure for potential for student access to microcomputers. These rankings are shown in state order in Appendix A.

Below the rankings are state projections on the number of microcomputers installed by grade level and percent by brand (manufacturer). Quantities do not total due to K-12 (combined) and special education schools not shown.

The table below shows statewide percentages of schools using microcomputers and Micro-Intensity by the various other measures with which they were reviewed in the text; grade level, poverty level, and metro status. Both Fall 1984 and Fall 1983 data are shown. The two right-hand columns show national figures for Fall 1984 for easy comparison with each state. N.A. means data not available or not applicable.

For more information on the derivation of microcomputer projections and Micro-Intensity, see Methodology, Appendix C.

Alabama Dept. of Education
501 Dexter Avenue
Montgomery, AL 36104
205/261-5156

Superintendent:

Dr. Wayne Teague

CAI Coordinator(s):

None

| | |
|---|---|
| Number of districts: | 130 |
| Number of public schools: | 1,389 |
| Number of Catholic schools: | 54 |
| Number of private schools: | 256 |

State Ranking (Of 50 States & Wash. D.C.)

| | |
|---|---|
| % districts using micros: | 27 |
| % public schools using micros: | 43 |
| Number of microcomputers:* | 30 |
| Micro-Intensity (of schools using microcomputers): | 45 |

Microcomputers Installed:*

| By school type | | % by brand | |
|---|---|---|---|
| Elementary: | 2,362 | Apple: | 53.3 |
| Junior High: | 578 | Commodore: | 4.0 |
| Senior High: | 2,925 | Radio Shack: | 31.6 |
| Total: | 6,613 | Other: | 11.1 |

*Forecast based on 90.3 % of schools using microcomputers in the state.

| | STATE FALL '84 | | STATE FALL '83 | | NATIONAL COMPARISON FALL '84 | |
|---|---|---|---|---|---|---|
| | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity |
| PUBLIC SCHOOLS | | | | | | |
| Districts | 96.9 | 92.2 | 80.0 | NA | 94.2 | NA |
| All Schools | 75.7 | 89.5 | 42.3 | 157.1 | 85.1 | 63.5 |
| Elementary | 72.8 | 104.5 | 35.4 | 158.1 | 82.2 | 79.3 |
| Junior High | 75.0 | 96.0 | 52.2 | 187.0 | 93.1 | 61.2 |
| Senior High | 85.3 | 69.8 | 61.2 | 158.1 | 94.6 | 51.5 |
| 0-4.9% poverty | 83.3 | 42.7 | 100.0 | 89.7 | 91.7 | 54.4 |
| 5-11.9% poverty | 97.1 | 61.9 | 91.7 | 79.2 | 91.9 | 62.0 |
| 12-24.9% poverty | 69.8 | 99.6 | 58.9 | 161.4 | 84.8 | 67.5 |
| Over 25% poverty | 80.6 | 92.0 | 33.7 | 161.2 | 74.4 | 73.3 |
| Urban | 77.0 | 83.9 | 54.0 | 170.3 | 81.7 | 72.4 |
| Suburban | 76.7 | 86.8 | 51.9 | 201.9 | 89.5 | 64.7 |
| Rural | 74.1 | 96.2 | 33.3 | 126.6 | 84.0 | 54.9 |
| PRIVATE SCHOOLS | | | | | | |
| Catholic schools | 55.6 | 84.3 | 13.0 | NA | 63.4 | 73.5 |
| Private schools | 38.3 | 55.9 | 15.7 | NA | 46.4 | 40.5 |

Alaska Dept. of Education
AK Office Bldg. - Pouch F
Jumeau, AK 99811
907/465-2800

Superintendent:

Dr. Harold Raynolds, Jr.

CAI Coordinator(s):

Paul Berg

| | |
|---|---|
| Number of districts: | 53 |
| Number of public schools: | 453 |
| Number of Catholic schools: | 6 |
| Number of private schools: | 52 |

State Ranking (Of 50 States & Wash. D.C.)

| | |
|---|---|
| % districts using micros: | 51 |
| % public schools using micros: | 36 |
| Number of microcomputers:* | 37 |
| Micro-Intensity (of schools using microcomputers): | 1 |

Microcomputers Installed:*

| By school type | | % by brand | |
|---|---|---|---|
| Elementary: | 1,618 | Apple: | 95.3 |
| Junior High: | 376 | Commodore: | 0.5 |
| Senior High: | 903 | Radio Shack: | 0.3 |
| Total: | 3,827 | Other: | 3.9 |

*Forecast based on 97.0 % of schools using microcomputers in the state.

| | STATE FALL '84 | | STATE FALL '83 | | NATIONAL COMPARISON FALL '84 | |
|---|---|---|---|---|---|---|
| | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity |
| PUBLIC SCHOOLS | | | | | | |
| Districts | 69.8 | 10.1 | 17.0 | NA | 94.2 | NA |
| All Schools | 80.6 | 24.1 | 46.5 | 103.5 | 85.1 | 63.5 |
| Elementary | 78.7 | 29.9 | 60.1 | 208.9 | 82.2 | 79.3 |
| Junior High | 90.0 | 27.9 | 71.4 | 199.3 | 93.1 | 61.2 |
| Senior High | 81.9 | 26.0 | 46.2 | 63.4 | 94.6 | 51.5 |
| 0-4.9% poverty | 70.0 | 18.0 | 0.0 | 0.0 | 91.7 | 54.4 |
| 5-11.9% poverty | 84.3 | 29.9 | 79.0 | 103.5 | 91.9 | 62.0 |
| 12-24.9% poverty | 79.7 | 22.6 | 0.0 | 0.0 | 84.8 | 67.5 |
| Over 25% poverty | 78.9 | 9.7 | 70.8 | 0.0 | 74.4 | 73.3 |
| Urban | 0.0 | 0.0 | 0.0 | 0.0 | 81.7 | 72.4 |
| Suburban | 100.0 | 35.7 | 85.7 | 139.0 | 89.5 | 64.7 |
| Rural | 83.5 | 25.3 | 44.4 | 99.8 | 84.0 | 54.9 |
| PRIVATE SCHOOLS | | | | | | |
| Catholic schools | 83.3 | 53.8 | 50.0 | NA | 63.4 | 73.5 |
| Private schools | 13.5 | 33.3 | 0.0 | NA | 46.4 | 40.5 |

Arizona Dept. of Education
1535 W. Jefferson St.
Phoenix, AZ 85007
602/255-5393

Superintendent:

Carolyn Warner

CAI Coordinator(s):

Tillman Turley

| | |
|---|---|
| Number of districts: | 210 |
| Number of public schools: | 902 |
| Number of Catholic schools: | 54 |
| Number of private schools: | 321 |

State Ranking (Of 50 States & Wash. D.C.)

| | |
|---|---|
| % districts using micros: | 43 |
| % public schools using micros: | 31 |
| Number of microcomputers:* | 19 |
| Micro-Intensity (of schools using microcomputers): | 7 |

Microcomputers Installed:*

| By school type | | % by brand | |
|---|---|---|---|
| Elementary: | 4,928 | Apple: | 33.2 |
| Junior High: | 2,117 | Commodore: | 31.5 |
| Senior High: | 3,103 | Radio Shack: | 19.0 |
| Total: | 10,273 | Other: | 16.3 |

*Forecast based on 90.5 % of schools using microcomputers in the state.

| | STATE FALL '84 | | STATE FALL '83 | | NATIONAL COMPARISON FALL '84 | |
|---|---|---|---|---|---|---|
| | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity |
| PUBLIC SCHOOLS | | | | | | |
| Districts | 88.6 | 52.5 | 78.3 | NA | 94.2 | NA |
| All Schools | 83.3 | 45.8 | 64.0 | 71.1 | 85.1 | 63.5 |
| Elementary | 79.7 | 50.6 | 56.4 | 78.6 | 82.2 | 79.3 |
| Junior High | 96.2 | 32.4 | 78.9 | 50.1 | 93.1 | 61.2 |
| Senior High | 96.5 | 49.5 | 92.4 | 77.4 | 94.6 | 51.5 |
| 0-4.9% poverty | 83.0 | 56.6 | 94.2 | 79.3 | 91.7 | 54.4 |
| 5-11.9% poverty | 86.7 | 50.8 | 64.3 | 66.0 | 91.9 | 62.0 |
| 12-24.9% poverty | 82.9 | 39.8 | 59.7 | 81.8 | 84.8 | 67.5 |
| Over 25% poverty | 81.9 | 42.7 | 65.7 | 58.9 | 74.4 | 73.3 |
| Urban | 79.3 | 55.0 | 60.6 | 100.3 | 81.7 | 72.4 |
| Suburban | 82.6 | 52.6 | 59.4 | 59.4 | 89.5 | 64.7 |
| Rural | 87.5 | 32.0 | 69.0 | 50.4 | 84.0 | 54.9 |
| PRIVATE SCHOOLS | | | | | | |
| Catholic schools | 44.4 | 79.9 | 30.9 | NA | 63.4 | 73.5 |
| Private schools | 32.1 | 35.2 | 11.3 | NA | 46.4 | 40.5 |

Arkansas Dept. of Education
State Capitol Grounds
Little Rock, AR 72201
501/371-1563

Superintendent:

Dr. Daniel L. Pilkinton

CAI Coordinator(s):

Charles D. Watson

| | |
|---|---|
| Number of districts: | 363 |
| Number of public schools: | 1,108 |
| Number of Catholic schools: | 40 |
| Number of private schools: | 67 |

State Ranking (Of 50 States & Wash. D.C.)

| | |
|---|---|
| % districts using micros: | 31 |
| % public schools using micros: | 30 |
| Number of microcomputers:* | 28 |
| Micro-Intensity (of schools using microcomputers): | 18 |

Microcomputers Installed:*

| By school type | | % by brand | |
|---|---|---|---|
| Elementary: | 2,511 | Apple: | 14.1 |
| Junior High: | 886 | Commodore: | 44.3 |
| Senior High: | 2,996 | Radio Shack: | 27.7 |
| Total: | 7,084 | Other: | 13.9 |

*Forecast based on 81.1 % of schools using microcomputers in the state.

| | STATE FALL '84 | | STATE FALL '83 | | NATIONAL COMPARISON FALL '84 | |
|---|---|---|---|---|---|---|
| | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity |
| PUBLIC SCHOOLS | | | | | | |
| Districts | 96.1 | 57.4 | 77.7 | NA | 94.2 | NA |
| All Schools | 84.0 | 51.3 | 56.2 | 75.0 | 85.1 | 63.5 |
| Elementary | 77.7 | 67.4 | 43.9 | 87.4 | 82.2 | 79.3 |
| Junior High | 89.1 | 67.4 | 61.5 | 103.0 | 93.1 | 61.2 |
| Senior High | 95.0 | 37.9 | 78.2 | 60.0 | 94.6 | 51.5 |
| 0-4.9% poverty | 100.0 | 111.7 | 0.0 | 59.3 | 91.7 | 54.4 |
| 5-11.9% poverty | 92.4 | 46.5 | 50.0 | 71.8 | 91.9 | 62.0 |
| 12-24.9% poverty | 85.8 | 53.2 | 63.8 | 79.3 | 84.8 | 67.5 |
| Over 25% poverty | 80.1 | 52.6 | 52.3 | 73.4 | 74.4 | 73.3 |
| Urban | 80.9 | 69.0 | 72.1 | 92.4 | 81.7 | 72.4 |
| Suburban | 89.3 | 57.3 | 56.3 | 68.8 | 89.5 | 64.7 |
| Rural | 82.9 | 49.0 | 53.4 | 73.4 | 84.0 | 54.9 |
| PRIVATE SCHOOLS | | | | | | |
| Catholic schools | 42.5 | 69.1 | 12.5 | NA | 63.4 | 73.5 |
| Private schools | 46.3 | 57.0 | 19.4 | NA | 46.4 | 40.5 |

lifornia Dept. of Education
21 Capitol Mall
acramento, CA 95814
16/445-4688
perintendent:

Bill Honig

AI Coordinator(s):

None

umber of districts: 1,037
umber of public schools: 7,038
umber of Catholic schools: 1,053
umber of private schools: 2,359

State Ranking (Of 50 States & Wash. D.C.)

| | |
|---|---|
| % districts using micros: | 16 |
| % public schools using micros: | 5 |
| Number of microcomputers:* | 1 |
| Micro-Intensity (of schools using microcomputers): | 42 |

Microcomputers Installed:*

| By school type | | % by brand | |
|---|---|---|---|
| Elementary: | 19,852 | Apple: | 59.4 |
| Junior High: | 9,922 | Commodore: | 15.8 |
| Senior High: | 19,588 | Radio Shack: | 14.0 |
| Total: | 50,356 | Other: | 10.8 |

*Forecast based on 86.9 % of schools using microcomputers in the state.

| | STATE FALL '84 | | STATE FALL '83 | | NATIONAL COMPARISON FALL '84 | |
|---|---|---|---|---|---|---|
| | % Using Micros | Micro-ntensity | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity |
| PUBLIC SCHOOLS | | | | | | |
| Districts | 99.0 | 92.3 | 92.6 | NA | 94.2 | NA |
| All Schools | 93.3 | 81.2 | 82.9 | 125.6 | 85.1 | 63.5 |
| Elementary | 94.4 | 102.5 | 84.3 | 161.7 | 82.2 | 79.3 |
| Junior High | 98.0 | 70.5 | 94.2 | 109.2 | 93.1 | 61.2 |
| Senior High | 95.4 | 59.9 | 87.8 | 92.3 | 94.6 | 51.5 |
| 0-4.9% poverty | 96.4 | 56.8 | 91.0 | 88.6 | 91.7 | 54.4 |
| 5-11.9% poverty | 98.6 | 69.3 | 90.1 | 144.8 | 91.9 | 62.0 |
| 12-24.9% poverty | 94.0 | 100.6 | 83.9 | 115.8 | 84.8 | 67.5 |
| Over 25% poverty | 81.5 | 72.2 | 78.6 | 84.2 | 74.4 | 73.3 |
| Urban | 91.6 | 96.1 | 81.5 | 160.3 | 81.7 | 72.4 |
| Suburban | 94.1 | 78.9 | 83.5 | 118.4 | 89.5 | 64.7 |
| Rural | 93.8 | 48.4 | 82.5 | 67.5 | 84.0 | 54.9 |
| PRIVATE SCHOOLS | | | | | | |
| Catholic schools | 81.6 | 86.5 | 19.3 | NA | 63.4 | 73.5 |
| Private schools | 52.3 | 41.7 | 25.5 | NA | 46.4 | 40.5 |



BEST COPY AVAILABLE

Colorado Dept. of Education
303 West Colfax Av.
Denver, CO 80204
303/534-8871

Superintendent:

Dr. Calvin M. Frazier

CAI Coordinator(s):

Dean Hert

| | |
|---|---|
| Number of districts: | 187 |
| Number of public schools: | 1,242 |
| Number of Catholic schools: | 63 |
| Number of private schools: | 176 |

State Ranking (Of 50 States & Wash. D.C.)

| | |
|---|---|
| % districts using micros: | 20 |
| % public schools using micros: | 2 |
| Number of microcomputers:* | 17 |
| Micro-Intensity (of schools using microcomputers): | 12 |

Microcomputers Installed:*

| By school type | | % by brand | |
|---|---|---|---|
| Elementary: | 5,085 | Apple: | 84.0 |
| Junior High: | 1,866 | Commodore: | 5.0 |
| Senior High: | 3,647 | Radio Shack: | 3.2 |
| Total: | 10,991 | Other: | 7.8 |

*Forecast based on 89.2 % of schools using microcomputers in the state.

| | STATE FALL '84 | | STATE FALL '83 | | NATIONAL COMPARISON FALL '84 | |
|---|---|---|---|---|---|---|
| | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity |
| PUBLIC SCHOOLS | | | | | | |
| Districts | 98.9 | 47.7 | 93.5 | NA | 94.2 | NA |
| All Schools | 96.7 | 48.4 | 87.3 | 73.3 | 85.1 | 63.5 |
| Elementary | 96.7 | 54.1 | 85.7 | 79.7 | 82.2 | 79.3 |
| Junior High | 98.4 | 51.8 | 92.8 | 80.5 | 93.1 | 61.2 |
| Senior High | 99.1 | 42.7 | 91.7 | 65.7 | 94.6 | 51.5 |
| 0-4.9% poverty | 97.8 | 38.7 | 97.4 | 85.6 | 91.7 | 54.4 |
| 5-11.9% poverty | 97.9 | 48.4 | 93.0 | 60.9 | 91.9 | 62.0 |
| 12-24.9% poverty | 97.7 | 67.8 | 83.5 | 99.5 | 84.8 | 67.5 |
| Over 25% poverty | 85.9 | 29.5 | 77.2 | 37.9 | 74.4 | 73.3 |
| Urban | 99.1 | 65.3 | 86.5 | 97.3 | 81.7 | 72.4 |
| Suburban | 97.6 | 41.6 | 94.4 | 58.3 | 89.5 | 64.7 |
| Rural | 94.2 | 42.0 | 82.6 | 67.4 | 84.0 | 54.9 |
| PRIVATE SCHOOLS | | | | | | |
| Catholic schools | 63.5 | 61.8 | 37.5 | NA | 63.4 | 73.5 |
| Private schools | 51.1 | 28.1 | 15.7 | NA | 46.4 | 40.5 |

Connecticut Dept. of Education
165 Capitol Ave.
Hartford, CT 06115
203/566-5677

Superintendent:

Dr. Gerald N. Tirozzi

CAI Coordinator(s):

Elizabeth M. Glass

| | |
|---|---|
| Number of districts: | 168 |
| Number of public schools: | 993 |
| Number of Catholic schools: | 196 |
| Number of private schools: | 170 |

State Ranking (Of 50 States & Wash. D.C.)

| | |
|---|---|
| % districts using micros: | 32 |
| % public schools using micros: | 14 |
| Number of microcomputers:* | 20 |
| Micro-Intensity (of schools using microcomputers): | 9 |

Microcomputers Installed:*

| By school type | | % by brand | |
|---|---|---|---|
| Elementary: | 3,743 | Apple: | 49.0 |
| Junior High: | 1,700 | Commodore: | 16.0 |
| Senior High: | 4,324 | Radio Shack: | 23.0 |
| Total: | 9,811 | Other: | 12.0 |

*Forecast based on 85.8 % of schools using microcomputers in the state.

| | STATE FALL '84 | | STATE FALL '83 | | NATIONAL COMPARISON FALL '84 | |
|---|---|---|---|---|---|---|
| | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity |
| PUBLIC SCHOOLS | | | | | | |
| Districts | 95.8 | 47.9 | 91.1 | NA | 94.2 | NA |
| All Schools | 89.4 | 48.1 | 75.4 | 81.7 | 85.1 | 63.5 |
| Elementary | 89.6 | 59.3 | 74.5 | 93.4 | 82.2 | 79.3 |
| Junior High | 98.5 | 45.9 | 87.0 | 76.0 | 93.1 | 61.2 |
| Senior High | 94.3 | 38.1 | 80.9 | 71.7 | 94.6 | 51.5 |
| 0-4.9% poverty | 97.0 | 42.3 | 82.8 | 77.3 | 91.7 | 54.4 |
| 5-11.9% poverty | 95.4 | 50.2 | 76.6 | 92.7 | 91.9 | 62.0 |
| 12-24.9% poverty | 75.0 | 50.2 | 67.4 | 78.9 | 84.8 | 67.5 |
| Over 25% poverty | 72.7 | 79.2 | 0.0 | 0.0 | 74.4 | 73.3 |
| Urban | 86.1 | 52.7 | 75.0 | 87.1 | 81.7 | 72.4 |
| Suburban | 90.5 | 47.0 | 75.5 | 86.1 | 89.5 | 64.7 |
| Rural | 91.8 | 44.4 | 75.8 | 69.0 | 84.0 | 54.9 |
| PRIVATE SCHOOLS | | | | | | |
| Catholic schools | 70.0 | 71.1 | 23.4 | NA | 63.4 | 73.5 |
| Private schools | 61.8 | 32.4 | 43.9 | NA | 46.4 | 40.5 |

Delaware Dept. of Education
Federal/E. Loockerman Sts.
Dover, DE 19901
302/736-4629

Superintendent:

Dr. William B. Keene

CAI Coordinator(s):

Dr. William J. Geppert

| | |
|---|---|
| Number of districts: | 19 |
| Number of public schools: | 170 |
| Number of Catholic schools: | 31 |
| Number of private schools: | 85 |

State Ranking (Of 50 States & Wash. D.C.)

| | |
|---|---|
| % districts using micros: | 37 |
| % public schools using micros: | 39 |
| Number of microcomputers:* | 50 |
| Micro-Intensity (of schools using microcomputers): | 32 |

Microcomputers Installed:*

| By school type | | % by brand | |
|---|---|---|---|
| Elementary: | 397 | Apple: | 67.0 |
| Junior High: | 249 | Commodore: | 9.6 |
| Senior High: | 644 | Radio Shack: | 3.7 |
| Total: | 1,345 | Other: | 19.7 |

*Forecast based on 94.9% of schools using microcomputers in the state.

| | STATE FALL '84 | | STATE FALL '83 | | NATIONAL COMPARISON FALL '84 | |
|---|---|---|---|---|---|---|
| | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity |
| PUBLIC SCHOOLS | | | | | | |
| Districts | 94.7 | 66.6 | 89.5 | NA | 94.2 | NA |
| All Schools | 80.0 | 63.7 | 77.9 | 95.6 | 85.1 | 63.5 |
| Elementary | 77.4 | 93.8 | 75.5 | 129.7 | 82.2 | 79.3 |
| Junior High | 95.8 | 60.8 | 91.3 | 81.9 | 93.1 | 61.2 |
| Senior High | 80.0 | 51.1 | 87.9 | 71.8 | 94.6 | 51.5 |
| 0-4.9% poverty | 75.0 | 46.6 | 0.0 | 103.3 | 91.7 | 54.4 |
| 5-11.9% poverty | 100.0 | 59.9 | 83.3 | 60.3 | 91.9 | 62.0 |
| 12-24.9% poverty | 81.0 | 68.1 | 74.3 | 88.9 | 84.8 | 67.5 |
| Over 25% poverty | 0.0 | 0.0 | 0.0 | 0.0 | 74.4 | 73.3 |
| Urban | 93.3 | 58.7 | 95.6 | 82.3 | 81.7 | 72.4 |
| Suburban | 80.0 | 109.4 | 73.3 | 126.6 | 89.5 | 64.7 |
| Rural | 72.7 | 50.9 | 69.6 | 88.2 | 84.0 | 54.9 |
| PRIVATE SCHOOLS | | | | | | |
| Catholic schools | 77.4 | 57.2 | 41.9 | NA | 63.4 | 73.5 |
| Private schools | 36.5 | 33.4 | 22.9 | NA | 46.4 | 40.5 |

# DISTRICT OF COLUMBIA

D.C. Public Schools
415 12th St. NW
Washington, DC 20004
202/724-4044

Superintendent:

Floretta D. McKenzie

CAI Coordinator(s):

Dr. Kno Jhin

| | |
|---|---|
| Number of districts: | 8 |
| Number of public schools: | 185 |
| Number of Catholic schools: | 41 |
| Number of private schools: | 62 |

State Ranking (Of 50 States & Wash. D.C.)

| | |
|---|---|
| % districts using micros: | 45 |
| % public schools using micros: | 16 |
| Number of microcomputers:* | 49 |
| Micro-Intensity (of schools using microcomputers): | 22 |

Microcomputers Installed:*

| By school type | | % by brand | |
|---|---|---|---|
| Elementary: | 868 | Apple: | 1.0 |
| Junior High: | 347 | Commodore: | 35.9 |
| Senior High: | 324 | Radio Shack: | 4.7 |
| Total: | 1,554 | Other: | 58.4 |

*Forecast based on 67.1% of schools using microcomputers in the state.

| | STATE FALL '84 | | STATE FALL '83 | | NATIONAL COMPARISON FALL '84 | |
|---|---|---|---|---|---|---|
| | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity |
| PUBLIC SCHOOLS | | | | | | |
| Districts | 87.5 | 0.0 | 87.5 | NA | 94.2 | NA |
| All Schools | 88.7 | 55.2 | 61.1 | 54.0 | 85.1 | 63.5 |
| Elementary | 90.5 | 54.7 | 53.5 | 48.6 | 82.2 | 79.3 |
| Junior High | 100.0 | 51.1 | 96.3 | 60.4 | 93.1 | 61.2 |
| Senior High | 75.0 | 62.6 | 66.7 | 95.1 | 94.6 | 51.5 |
| 0-4.9% poverty | 0.0 | 0.0 | 0.0 | 0.0 | 91.7 | 54.4 |
| 5-11.9% poverty | 0.0 | 0.0 | 0.0 | 0.0 | 91.9 | 62.0 |
| 12-24.9% poverty | 0.0 | 0.0 | 64.8 | 54.0 | 84.8 | 67.5 |
| Over 25% poverty | 88.5 | 55.2 | 0.0 | 0.0 | 74.4 | 73.3 |
| Urban | 89.0 | 55.9 | 61.0 | 54.0 | 81.7 | 72.4 |
| Suburban | 0.0 | 0.0 | 0.0 | 0.0 | 89.5 | 64.7 |
| Rural | 0.0 | 0.0 | 0.0 | 0.0 | 84.0 | 54.9 |
| PRIVATE SCHOOLS | | | | | | |
| Catholic schools | 61.0 | 39.4 | 0.0 | NA | 63.4 | 73.3 |
| Private schools | 66.8 | 42.4 | 21.9 | NA | 46.4 | 40.3 |

Florida Dept. of Education
Collins Bldg. B-10a
Tallahassee, FL 32301
904/488-1234

Superintendent:

Ralph D. Turlington

CAI Coordinator(s):

Doris Nabi

| | |
|---|---|
| Number of districts: | 93 |
| Number of public schools: | 2,092 |
| Number of Catholic schools: | 190 |
| Number of private schools: | 983 |

State Ranking (Of 50 States & Wash. D.C.)

| | |
|---|---|
| % districts using micros: | 33 |
| % public schools using micros: | 11 |
| Number of microcomputers:* | 5 |
| Micro-Intensity (of schools using microcomputers): | 25 |

Microcomputers Installed:*

| By school type | | % by brand | |
|---|---|---|---|
| Elementary: | 9,304 | Apple: | 40.8 |
| Junior High: | 5,436 | Commodore: | 6.2 |
| Senior High: | 9,368 | Radio Shack: | 37.5 |
| Total: | 24,570 | Other: | 15.5 |

*Forecast based on 90.9 % of schools using microcomputers in the state.

| | STATE FALL '84 | | STATE FALL '83 | | NATIONAL COMPARISON FALL '84 | |
|---|---|---|---|---|---|---|
| | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity |
| PUBLIC SCHOOLS | | | | | | |
| Districts | 95.7 | 65.5 | 96.8 | NA | 94.2 | NA |
| All Schools | 90.3 | 59.7 | 68.2 | 92.8 | 85.1 | 63.5 |
| Elementary | 89.4 | 72.3 | 58.7 | 108.1 | 82.2 | 79.3 |
| Junior High | 97.4 | 62.4 | 90.1 | 103.9 | 93.1 | 61.2 |
| Senior High | 96.7 | 47.2 | 93.2 | 76.6 | 94.6 | 51.5 |
| 0-4.9% poverty | 0.0 | 0.0 | 0.0 | 0.0 | 91.7 | 54.4 |
| 5-11.9% poverty | 100.0 | 95.3 | 93.8 | 84.2 | 91.9 | 62.0 |
| 12-24.9% poverty | 90.4 | 59.1 | 67.1 | 92.6 | 84.8 | 67.3 |
| Over 25% poverty | 90.0 | 59.8 | 69.1 | 98.9 | 74.4 | 73.3 |
| Urban | 92.0 | 63.4 | 61.2 | 101.2 | 81.7 | 72.4 |
| Suburban | 89.5 | 54.8 | 72.7 | 88.8 | 89.5 | 64.7 |
| Rural | 88.2 | 58.4 | 72.3 | 90.2 | 84.0 | 54.9 |
| PRIVATE SCHOOLS | | | | | | |
| Catholic schools | 66.3 | 58.6 | 19.6 | NA | 63.4 | 73.5 |
| Private schools | 40.2 | 27.3 | 23.3 | NA | 46.4 | 40.5 |

Georgia Dept. of Education
2066 Twin Towers East
Atlanta, GA 30334
404/656-2800

Superintendent:

Dr. Charles McDaniel

CAI Coordinator(s):

Dr. C. Curtis Dixon
Tom Broom

| | |
|---|---|
| Number of districts: | 207 |
| Number of public schools: | 1,815 |
| Number of Catholic schools: | 37 |
| Number of private schools: | 428 |

State Ranking (Of 50 States & Wash. D.C.)

| | |
|---|---|
| % districts using micros: | 38 |
| % public schools using micros: | 35 |
| Number of microcomputers:* | 26 |
| Micro-Intensity (of schools using microcomputers): | 50 |

Microcomputers Installed:*

| By school type | | % by brand | |
|---|---|---|---|
| Elementary: | 2,935 | Apple: | 59.1 |
| Junior High: | 1,097 | Commodore: | 15.2 |
| Senior High: | 4,115 | Radio Shack: | 19.3 |
| Total: | 8,389 | Other: | 6.4 |

*Forecast based on 88.9 % of schools using microcomputers in the state.

| | STATE FALL '84 | | STATE FALL '83 | | NATIONAL COMPARISON FALL '84 | |
|---|---|---|---|---|---|---|
| | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity |
| PUBLIC SCHOOLS | | | | | | |
| Districts | 94.7 | 96.1 | 79.8 | NA | 94.2 | NA |
| All Schools | 80.8 | 107.1 | 54.9 | 152.2 | 85.1 | 63.5 |
| Elementary | 75.9 | 151.3 | 45.7 | 196.9 | 82.2 | 79.3 |
| Junior High | 90.8 | 133.4 | 66.4 | 172.3 | 93.1 | 61.2 |
| Senior High | 93.8 | 76.4 | 83.6 | 123.5 | 94.8 | 51.3 |
| 0-4.9% poverty | 96.0 | 44.5 | 100.0 | 62.2 | 91.7 | 54.4 |
| 5-11.9% poverty | 92.1 | 138.1 | 79.9 | 189.4 | 91.9 | 62.0 |
| 12-24.9% poverty | 79.0 | 99.6 | 52.0 | 118.2 | 84.8 | 67.3 |
| Over 25% poverty | 74.8 | 109.7 | 44.0 | 157.8 | 74.4 | 73.3 |
| Urban | 76.2 | 100.5 | 56.7 | 203.8 | 81.7 | 72.4 |
| Suburban | 88.8 | 138.9 | 69.7 | 179.4 | 89.5 | 64.7 |
| Rural | 79.0 | 97.4 | 47.2 | 123.6 | 84.0 | 54.9 |
| PRIVATE SCHOOLS | | | | | | |
| Catholic schools | 81.1 | 76.8 | 8.1 | NA | 83.4 | 73.5 |
| Private schools | 39.8 | 52.3 | 10.5 | NA | 46.4 | 48.5 |

Hawaii Dept. of Education
1390 Miller Street
Honolulu, HA 96813
808/548-6911

Superintendent:

Dr. Dennis H. Thompson

CAI Coordinator(s):

Mrs. Patsy M. Inumo

| | |
|---|---|
| Number of districts: | 7 |
| Number of public schools: | 234 |
| Number of Catholic schools: | 40 |
| Number of private schools: | 95 |

State Ranking (Of 50 States & Wash. D.C.)

| | |
|---|---|
| % districts using micros: | 1 |
| % public schools using micros: | 48 |
| Number of microcomputers:* | 51 |
| Micro-Intensity (of schools using microcomputers): | 51 |

Microcomputers Installed:*

| By school type | | % by brand | |
|---|---|---|---|
| Elementary: | 292 | Apple: | 43.9 |
| Junior High: | 78 | Commodore: | 13.2 |
| Senior High: | 308 | Radio Shack: | 28.8 |
| Total: | 705 | Other: | 14.1 |

*Forecast based on 99.4% of schools using microcomputers in the state.

| | STATE FALL '84 | | STATE FALL '83 | | NATIONAL COMPARISON FALL '84 | |
|---|---|---|---|---|---|---|
| | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity |
| PUBLIC SCHOOLS | | | | | | |
| Districts | 100.0 | 247.2 | 100.0 | NA | 94.2 | NA |
| All Schools | 67.1 | 180.5 | 26.6 | 264.4 | 85.1 | 63.5 |
| Elementary | 60.6 | 200.5 | 11.5 | 222.6 | 82.2 | 79.3 |
| Junior High | 75.0 | 201.7 | 33.3 | 356.6 | 93.1 | 61.2 |
| Senior High | 100.0 | 150.7 | 96.8 | 258.5 | 94.6 | 51.5 |
| 0-4.9% poverty | 0.0 | 0.0 | 0.0 | 0.0 | 91.7 | 54.4 |
| 5-11.9% poverty | 67.3 | 184.9 | 26.2 | 259.6 | 91.9 | 62.0 |
| 12-24.9% poverty | 67.5 | 176.8 | 30.0 | 297.2 | 84.8 | 67.5 |
| Over 25% poverty | 0.0 | 0.0 | 0.0 | 0.0 | 74.4 | 73.3 |
| Urban | 65.7 | 135.0 | 24.3 | 216.0 | 81.7 | 72.4 |
| Suburban | 68.5 | 214.0 | 23.3 | 288.5 | 89.5 | 64.7 |
| Rural | 67.1 | 190.5 | 32.4 | 293.8 | 84.0 | 54.9 |
| PRIVATE SCHOOLS | | | | | | |
| Catholic schools | 32.5 | 86.5 | 5.1 | NA | 63.4 | 73.5 |
| Private schools | 19.0 | 52.8 | 2.3 | NA | 46.4 | 40.5 |

# IDAHO

Idaho Dept. of Education
Len B. Jordan Bldg.
Boise, ID 83720
208/334-3225

Superintendent:

Jerry L. Evans

CAI Coordinator(s):

None

| | |
|---|---|
| Number of districts: | 116 |
| Number of public schools: | 550 |
| Number of Catholic schools: | 13 |
| Number of private schools: | 53 |

State Ranking (Of 50 States & Wash. D.C.)

| | |
|---|---|
| % districts using micros: | 34 |
| % public schools using micros: | 17 |
| Number of microcomputers:* | 41 |
| Micro-Intensity (of schools using microcomputers): | 30 |

Microcomputers Installed:*

| By school type | | % by brand | |
|---|---|---|---|
| Elementary: | 1,383 | Apple: | 37.8 |
| Junior High: | 520 | Commodore: | 28.3 |
| Senior High: | 1,033 | Radio Shack: | 18.9 |
| Total: | 3,080 | Other: | 14.9 |

*Forecast based on 90.5 % of schools using microcomputers in the state.

| | STATE FALL '84 | | STATE FALL '83 | | NATIONAL COMPARISON FALL '84 | |
|---|---|---|---|---|---|---|
| | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity |
| PUBLIC SCHOOLS | | | | | | |
| Districts | 95.7 | 57.6 | 85.3 | NA | 94.2 | NA |
| All Schools | 87.8 | 62.7 | 66.0 | 83.2 | 85.1 | 63.5 |
| Elementary | 83.8 | 74.5 | 57.6 | 99.7 | 82.2 | 79.3 |
| Junior High | 94.4 | 72.3 | 68.9 | 101.4 | 93.1 | 61.2 |
| Senior High | 96.3 | 45.7 | 89.0 | 63.7 | 94.6 | 51.5 |
| 0-4.9% poverty | 85.7 | 19.4 | 63.2 | 41.6 | 91.7 | 54.4 |
| 5-11.9% poverty | 95.2 | 66.1 | 69.7 | 95.8 | 91.9 | 62.0 |
| 12-24.9% poverty | 80.9 | 62.3 | 63.5 | 71.3 | 84.8 | 67.5 |
| Over 25% poverty | 92.3 | 44.3 | 59.1 | 58.4 | 74.4 | 73.3 |
| Urban | 92.5 | 67.6 | 61.9 | 124.2 | 81.7 | 72.4 |
| Suburban | 76.5 | 89.7 | 64.7 | 131.1 | 89.5 | 64.7 |
| Rural | 87.7 | 58.5 | 66.9 | 76.1 | 84.0 | 54.9 |
| PRIVATE SCHOOLS | | | | | | |
| Catholic schools | 100.0 | 52.1 | 46.2 | NA | 63.4 | 73.5 |
| Private schools | 52.8 | 28.3 | 22.9 | NA | 46.4 | 40.5 |

Illinois Dept. of Education
100 North 1st St.
Springfield, IL 62777
217/782-2221

Superintendent:

Dr. Donald G. Gell

CAI Coordinator(s):

Wendell Meeks

| | |
|---|---|
| Number of districts: | 1,031 |
| Number of public schools: | 3,909 |
| Number of Catholic schools: | 765 |
| Number of private schools: | 587 |

State Ranking (Of 50 States & Wash. D.C.)

| | |
|---|---|
| % districts using micros: | 28 |
| % public schools using micros: | 28 |
| Number of microcomputers:* | 4 |
| Micro-Intensity (of schools using microcomputers): | 27 |

Microcomputers Installed:*

| By school type | | % by brand | |
|---|---|---|---|
| Elementary: | 9,737 | Apple: | 58.6 |
| Junior High: | 3,880 | Commodore: | 12.2 |
| Senior High: | 11,232 | Radio Shack: | 20.2 |
| Total: | 25,651 | Other: | 9.0 |

*Forecast based on 87.1 % of schools using microcomputers in the state.

| | STATE FALL '84 | | STATE FALL '83 | | NATIONAL COMPARISON FALL '84 | |
|---|---|---|---|---|---|---|
| | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity |
| PUBLIC SCHOOLS | | | | | | |
| Districts | 96.6 | 58.1 | 91.0 | NA | 94.2 | NA |
| All Schools | 85.0 | 62.0 | 68.5 | 85.9 | 85.1 | 63.5 |
| Elementary | 81.3 | 82.5 | 60.2 | 116.1 | 82.2 | 79.3 |
| Junior High | 96.2 | 50.8 | 87.4 | 77.9 | 93.1 | 61.2 |
| Senior High | 97.7 | 47.6 | 93.4 | 63.4 | 94.6 | 51.5 |
| 0-4.9% poverty | 94.0 | 63.0 | 78.8 | 90.5 | 91.7 | 54.4 |
| 5-11.9% poverty | 90.2 | 61.9 | 78.5 | 83.3 | 91.9 | 62.0 |
| 12-24.9% poverty | 90.0 | 58.3 | 47.7 | 79.3 | 84.8 | 67.5 |
| Over 25% poverty | 55.0 | 82.1 | 55.1 | 64.4 | 74.4 | 73.3 |
| Urban | 65.5 | 89.0 | 43.7 | 120.5 | 81.7 | 72.4 |
| Suburban | 91.0 | 56.4 | 74.6 | 83.0 | 89.5 | 64.7 |
| Rural | 90.3 | 52.7 | 76.6 | 70.2 | 84.0 | 54.9 |
| PRIVATE SCHOOLS | | | | | | |
| Catholic schools | 48.6 | 83.3 | 18.8 | NA | 63.4 | 73.5 |
| Private schools | 46.2 | 45.5 | 27.4 | NA | 46.4 | 60.5 |

Indiana Dept. of Education
Rm. 229, State House
Indianapolis, IN 46204
317/232-6610

Superintendent:

Dr. Harold H. Negley

CAI Coordinator(s):

None

| | |
|---|---|
| Number of districts: | 308 |
| Number of public schools: | 1,909 |
| Number of Catholic schools: | 225 |
| Number of private schools: | 375 |

State Ranking (Of 50 States & Wash. D.C.)

| | |
|---|---|
| % districts using micros: | 8 |
| % public schools using micros: | 8 |
| Number of microcomputers:* | 10 |
| Micro-Intensity (of schools using microcomputers): | 10 |

Microcomputers Installed:*

| By school type | | % by brand | |
|---|---|---|---|
| Elementary: | 8,082 | Apple: | 50.3 |
| Junior High: | 3,716 | Commodore: | 15.9 |
| Senior High: | 7,961 | Radio Shack: | 16.6 |
| Total: | 20,163 | Other: | 17.2 |

*Forecast based on 83.2 % of schools using microcomputers in the state.

| | STATE FALL '84 | | STATE FALL '83 | | NATIONAL COMPARISON FALL '84 | |
|---|---|---|---|---|---|---|
| | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity |
| PUBLIC SCHOOLS | | | | | | |
| Districts | 99.3 | 47.9 | 93.9 | NA | 94.2 | NA |
| All Schools | 92.9 | 48.2 | 80.3 | 83.8 | 85.1 | 63.5 |
| Elementary | 92.2 | 56.6 | 77.0 | 95.5 | 82.2 | 79.3 |
| Junior High | 97.7 | 43.6 | 90.0 | 88.6 | 93.1 | 61.2 |
| Senior High | 98.4 | 41.0 | 91.0 | 71.6 | 94.6 | 51.5 |
| 0-4.9% poverty | 95.0 | 44.0 | 80.3 | 76.1 | 91.7 | 54.4 |
| 5-11.9% poverty | 95.4 | 52.5 | 84.7 | 82.0 | 91.9 | 62.0 |
| 12-24.9% poverty | 90.3 | 44.7 | 69.5 | 106.5 | 84.8 | 67.5 |
| Over 25% poverty | 96.1 | 48.9 | 33.3 | 72.2 | 74.4 | 73.3 |
| Urban | 88.2 | 40.5 | 78.7 | 90.8 | 81.7 | 72.4 |
| Suburban | 93.5 | 54.4 | 81.5 | 82.2 | 89.5 | 64.7 |
| Rural | 95.8 | 53.7 | 80.7 | 77.6 | 84.0 | 54.9 |
| PRIVATE SCHOOLS | | | | | | |
| Catholic schools | 72.4 | 69.4 | 31.9 | NA | 63.4 | 73.5 |
| Private schools | 42.7 | 36.0 | 23.9 | NA | 46.4 | 40.5 |

Iowa Dept. of Education
Grimes State Office Bldg.
Des Moines, IA 50319
515/281-3799

Superintendent:

Robert D. Benton

CAI Coordinator(s):

Eric Erikson

| | |
|---|---|
| Number of districts: | 438 |
| Number of public schools: | 1,529 |
| Number of Catholic schools: | 180 |
| Number of private schools: | 116 |

State Ranking (Of 50 States & Wash. D.C.)

| | |
|---|---|
| % districts using micros: | 7 |
| % public schools using micros: | 6 |
| Number of microcomputers:* | 21 |
| Micro-Intensity (of schools using microcomputers): | 16 |

Microcomputers Installed:*

| By school type | | % by brand | |
|---|---|---|---|
| Elementary: | 3,073 | Apple: | 82.2 |
| Junior High: | 1,559 | Commodore: | 6.3 |
| Senior High: | 3,761 | Radio Shack: | 4.8 |
| Total: | 9,730 | Other: | 6.7 |

*Forecast based on 78.0 % of schools using microcomputers in the state.

| | STATE FALL '84 | | STATE FALL '83 | | NATIONAL COMPARISON FALL '84 | |
|---|---|---|---|---|---|---|
| | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity |
| PUBLIC SCHOOLS | | | | | | |
| Districts | 99.8 | 51.5 | 98.4 | NA | 94.2 | NA |
| All Schools | 93.1 | 49.9 | 83.7 | 67.5 | 85.1 | 63.5 |
| Elementary | 91.5 | 72.4 | 78.1 | 96.5 | 82.2 | 79.3 |
| Junior High | 98.8 | 46.7 | 93.4 | 58.4 | 93.1 | 61.2 |
| Senior High | 98.2 | 38.6 | 95.0 | 51.6 | 94.6 | 51.5 |
| 0-4.9% poverty | 100.0 | 41.6 | 92.9 | 49.6 | 91.7 | 54.4 |
| 5-11.9% poverty | 95.7 | 52.8 | 82.4 | 77.8 | 91.9 | 62.0 |
| 12-24.9% poverty | 88.9 | 5[illegible].0 | 85.6 | 55.1 | 84.8 | 67.5 |
| Over 25% poverty | 93.3 | 33.7 | 72.0 | 60.8 | 74.4 | 73.3 |
| Urban | 80.7 | 79.2 | 64.5 | 91.7 | 81.7 | 72.4 |
| Suburban | 96.2 | 55.0 | 86.0 | 93.6 | 89.5 | 64.7 |
| Rural | 95.4 | 42.7 | 87.6 | 60.0 | 84.0 | 54.9 |
| PRIVATE SCHOOLS | | | | | | |
| Catholic schools | 86.1 | 88.4 | 34.6 | NA | 63.4 | 73.5 |
| Private schools | 51.7 | 54.3 | 36.1 | NA | 46.4 | 40.5 |

Kansas Dept. of Education
120 East 10th Street
Topeka, KS 66612

Superintendent:

Dr. Harold Blackburn

CAI Coordinator(s):

Craig Haugsmess

| | |
|---|---|
| Number of districts: | 312 |
| Number of public schools: | 1,480 |
| Number of Catholic schools: | 111 |
| Number of private schools: | 96 |

State Ranking (Of 50 States & Wash. D.C.)

| | |
|---|---|
| % districts using micros: | 9 |
| % public schools using micros: | 10 |
| Number of microcomputers:* | 27 |
| Micro-Intensity (of schools using microcomputers): | 17 |

Microcomputers Installed:*

| By school type | | % by brand | |
|---|---|---|---|
| Elementary: | 2,860 | Apple: | 77.3 |
| Junior High: | 1,332 | Commodore: | 4.5 |
| Senior High: | 3,304 | Radio Shack: | 14.2 |
| Total: | 7,854 | Other: | 4.0 |

*Forecast based on 90.6 % of schools using microcomputers in the state.

| | STATE FALL '84 | | STATE FALL '83 | | NATIONAL COMPARISON FALL '84 | |
|---|---|---|---|---|---|---|
| | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity |
| PUBLIC SCHOOLS | | | | | | |
| Districts | 99.4 | 51.9 | 97.1 | NA | 94.2 | NA |
| All Schools | 90.7 | 49.9 | 71.1 | 62.1 | 85.1 | 63.5 |
| Elementary | 86.8 | 69.2 | 60.6 | 90.0 | 82.2 | 79.3 |
| Junior High | 96.2 | 50.1 | 77.4 | 61.9 | 93.1 | 61.2 |
| Senior High | 99.4 | 34.1 | 94.4 | 44.5 | 94.6 | 51.5 |
| 0-4.9% poverty | 95.5 | 44.7 | 88.5 | 64.2 | 91.7 | 54.4 |
| 5-11.9% poverty | 92.1 | 49.6 | 75.3 | 68.1 | 91.9 | 62.0 |
| 12-24.9% poverty | 88.0 | 53.9 | 63.2 | 57.8 | 84.8 | 67.5 |
| Over 25% poverty | 100.0 | 27.8 | 63.8 | 38.9 | 74.4 | 73.3 |
| Urban | 97.3 | 88.9 | 97.3 | 95.9 | 81.7 | 72.4 |
| Suburban | 82.9 | 50.9 | 68.5 | 73.1 | 89.5 | 64.7 |
| Rural | 91.8 | 41.8 | 67.2 | 53.1 | 84.0 | 54.9 |
| PRIVATE SCHOOLS | | | | | | |
| Catholic schools | 57.7 | 87.2 | 19.6 | NA | 63.4 | 73.5 |
| Private schools | 50.0 | 41.9 | 38.2 | NA | 46.4 | 40.5 |

Kentucky Dept. of Education
1918 Captiol Plaza Tower
Frankfort, KY 40601
502/564-4770

Superintendent:

Alice McDonald

CAI Coordinator(s):

Lydia Wells Sledge

| | |
|---|---|
| Number of districts: | 199 |
| Number of public schools: | 1,395 |
| Number of Catholic schools: | 193 |
| Number of private schools: | 115 |

State Ranking (Of 50 States & Wash. D.C.)

| | |
|---|---|
| % districts using micros: | 17 |
| % public schools using micros: | 37 |
| Number of microcomputers:* | 22 |
| Micro-Intensity (of schools using microcomputers): | 36 |

Microcomputers Installed:*

| By school type | | % by brand | |
|---|---|---|---|
| Elementary: | 2,790 | Apple: | 29.3 |
| Junior High: | 1,201 | Commodore: | 15.9 |
| Senior High: | 4,891 | Radio Shack: | 38.2 |
| Total: | 9,316 | Other: | 16.6 |

*Forecast based on 87.1% of schools using microcomputers in the state.

| | STATE FALL '84 | | STATE FALL '83 | | NATIONAL COMPARISON FALL '84 | |
|---|---|---|---|---|---|---|
| | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity |
| PUBLIC SCHOOLS | | | | | | |
| Districts | 99.0 | 87.0 | 84.4 | NA | 94.2 | NA |
| All Schools | 80.4 | 65.3 | 55.1 | 99.9 | 85.1 | 63.5 |
| Elementary | 73.4 | 94.5 | 47.3 | 130.4 | 82.2 | 79.3 |
| Junior High | 95.7 | 73.7 | 76.1 | 157.8 | 93.1 | 61.2 |
| Senior High | 94.7 | 48.1 | 71.0 | 72.9 | 94.6 | 51.5 |
| 0-4.9% poverty | 80.0 | 35.1 | 87.5 | 45.2 | 91.7 | 54.4 |
| 5-11.9% poverty | 94.2 | 51.9 | 55.3 | 114.7 | 91.9 | 62.0 |
| 12-24.9% poverty | 89.1 | 69.8 | 74.5 | 89.2 | 84.8 | 67.5 |
| Over 25% poverty | 65.7 | 85.9 | 41.1 | 113.7 | 74.4 | 73.3 |
| Urban | 87.5 | 64.8 | 60.5 | 120.7 | 81.7 | 72.4 |
| Suburban | 88.1 | 63.2 | 66.1 | 93.3 | 89.5 | 64.7 |
| Rural | 78.1 | 66.6 | 52.8 | 93.3 | 84.0 | 54.9 |
| PRIVATE SCHOOLS | | | | | | |
| Catholic schools | 42.5 | 77.7 | 14.7 | NA | 63.4 | 73.5 |
| Private schools | 52.2 | 25.3 | 35.7 | NA | 46.4 | 40.5 |

# LOUISIANA

Louisiana Dept. of Education
626 North 4th Street
Baton Rouge, LA 70804
504/342-4411

Superintendent:

Thomas G. Clausen

CAI Coordinator(s):

Dr. Jean R. Clement

State Ranking (Of 50 States & Wash. D.C.)

| | |
|---|---|
| % districts using micros: | 25 |
| % public schools using micros: | 50 |
| Number of microcomputers:* | 32 |
| Micro-Intensity (of schools using microcomputers): | 46 |

| | |
|---|---|
| Number of districts: | 72 |
| Number of public schools: | 534 |
| Number of Catholic schools: | 255 |
| Number of private schools: | 249 |

Microcomputers Installed:*

| By school type | | % by brand | |
|---|---|---|---|
| Elementary: | 1,767 | Apple: | 31.2 |
| Junior High: | 909 | Commodore: | 5.9 |
| Senior High: | 2,675 | Radio Shack: | 34.4 |
| Total: | 6,083 | Other: | 28.5 |

*Forecast based on 91.9% of schools using microcomputers in the state.

| | STATE FALL '84 | | STATE FALL '83 | | NATIONAL COMPARISON FALL '84 | |
|---|---|---|---|---|---|---|
| | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity |
| PUBLIC SCHOOLS | | | | | | |
| Districts | 97.2 | | | | | |
| All Schools | 65.5 | 92.2 | 91.7 | NA | 94.2 | NA |
| | | 96.9 | 45.4 | 135.6 | 85.1 | 63.5 |
| Elementary | 58.7 | | | | | |
| Junior High | 73.2 | 140.5 | 36.1 | 192.1 | 82.2 | 79.3 |
| Senior High | 79.9 | 99.6 | 57.2 | 146.5 | 93.1 | 61.2 |
| | | 75.6 | 60.3 | 103.9 | 94.6 | 51.5 |
| 0-4.9% poverty | 0.0 | | | | | |
| 5-11.9% poverty | 91.7 | 0.0 | 0.0 | 0.0 | 91.7 | 54.4 |
| 12-24.9% poverty | 67.0 | 83.6 | 74.5 | 276.2 | 91.9 | 62.0 |
| Over 25% poverty | 63.0 | 101.9 | 56.3 | 121.0 | 84.8 | 67.5 |
| | | 90.4 | 39.4 | 130.3 | 74.4 | 73.3 |
| Urban | 55.4 | | | | | |
| Suburban | 71.0 | 91.5 | 45.1 | 130.4 | 81.7 | 72.4 |
| Rural | 68.6 | 147.5 | 52.8 | 204.9 | 89.5 | 64.7 |
| | | 87.3 | 43.8 | 127.5 | 84.0 | 54.9 |
| PRIVATE SCHOOLS | | | | | | |
| Catholic schools | 47.8 | | | | | |
| Private schools | 32.1 | 90.0 | 4.4 | NA | 63.4 | 73.5 |
| | | 59.9 | 18.3 | NA | 46.4 | 40.5 |

Maine Dept. of Education
Education Bldg. - Sta 23
Augusta, ME 04333
207/289-3241

Superintendent:

Robert E. Boose

CAI Coordinator(s):

Richard Riley

| | |
|---|---|
| Number of districts: | 268 |
| Number of public schools: | 746 |
| Number of Catholic schools: | 25 |
| Number of private schools: | 133 |

State Ranking (Of 50 States & Wash. D.C.)

| | |
|---|---|
| % districts using micros: | 47 |
| % public schools using micros: | 34 |
| Number of microcomputers:* | 42 |
| Micro-Intensity (of schools using microcomputers): | 35 |

Microcomputers Installed:*

| By school type | | % by brand | |
|---|---|---|---|
| Elementary: | 1,312 | Apple: | 28.2 |
| Junior High: | 385 | Commodore: | 18.3 |
| Senior High: | 1,229 | Radio Shack: | 39.4 |
| Total: | 2,978 | Other: | 14.1 |

*Forecast based on 93.1 % of schools using microcomputers in the state.

| | STATE FALL '84 | | STATE FALL '83 | | NATIONAL COMPARISON FALL '84 | |
|---|---|---|---|---|---|---|
| | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity |
| PUBLIC SCHOOLS | | | | | | |
| Districts | 79.9 | 72.2 | 66.2 | NA | 94.2 | NA |
| All Schools | 81.2 | 65.2 | 64.5 | 92.9 | 85.1 | 63.5 |
| Elementary | 76.1 | 73.3 | 55.8 | 98.4 | 82.2 | 79.3 |
| Junior High | 97.1 | 72.3 | 88.6 | 110.3 | 93.1 | 61.2 |
| Senior High | 96.0 | 53.0 | 89.8 | 82.5 | 94.6 | 51.5 |
| 0-4.9% poverty | 85.2 | 54.1 | 94.7 | 92.0 | 91.7 | 54.4 |
| 5-11.9% poverty | 88.7 | 60.9 | 70.3 | 111.3 | 91.9 | 62.0 |
| 12-24.9% poverty | 79.3 | 69.2 | 65.6 | 87.9 | 84.8 | 67.5 |
| Over 25% poverty | 75.0 | 62.8 | 46.2 | 79.2 | 74.4 | 73.3 |
| Urban | 94.2 | 74.5 | 69.1 | 129.6 | 81.7 | 72.4 |
| Suburban | 88.7 | 77.4 | 72.2 | 113.3 | 89.5 | 64.7 |
| Rural | 78.9 | 62.1 | 63.0 | 83.5 | 84.0 | 54.9 |
| PRIVATE SCHOOLS | | | | | | |
| Catholic schools | 60.0 | 91.7 | 12.0 | NA | 63.4 | 73.5 |
| Private schools | 33.8 | 41.5 | 21.3 | NA | 46.4 | 40.5 |

Maryland Dept. of Education
200 W. Baltimore St.
Baltimore, MD 21201
301/659-2000

Superintendent:

David W. Hornbeck

CAI Coordinator(s):

Clarence Miller

| | |
|---|---|
| Number of districts: | 40 |
| Number of public schools: | 1,231 |
| Number of Catholic schools: | 187 |
| Number of private schools: | 389 |

State Ranking (Of 50 States & Wash. D.C.)

| | |
|---|---|
| % districts using micros: | 36 |
| % public schools using micros: | 25 |
| Number of microcomputers:* | 31 |
| Micro-Intensity (of schools using microcomputers): | 48 |

Microcomputers Installed:*

| By school type | | % by brand | |
|---|---|---|---|
| Elementary: | 2,250 | Apple: | 45.2 |
| Junior High: | 1,310 | Commodore: | 16.0 |
| Senior High: | 2,843 | Radio Shack: | 22.6 |
| Total: | 6,529 | Other: | 16.2 |

*Forecast based on 93.9 % of schools using microcomputers in the state.

| | STATE FALL '84 | | STATE FALL '83 | | NATIONAL COMPARISON FALL '84 | |
|---|---|---|---|---|---|---|
| | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity |
| PUBLIC SCHOOLS | | | | | | |
| Districts | 95.0 | 0.0 | 94.7 | NA | 94.2 | NA |
| All Schools | 85.7 | 98.6 | 59.7 | 150.3 | 85.1 | 63.5 |
| Elementary | 84.2 | 119.9 | 48.6 | 202.4 | 82.2 | 79.3 |
| Junior High | 99.4 | 105.2 | 84.4 | 167.8 | 93.1 | 61.2 |
| Senior High | 98.0 | 84.1 | 94.9 | 119.7 | 94.6 | 51.5 |
| 0-4.9% poverty | 98.5 | 99.1 | 73.1 | 144.1 | 91.7 | 54.4 |
| 5-11.9% poverty | 85.9 | 103.3 | 58.9 | 145.6 | 91.9 | 62.0 |
| 12-24.9% poverty | 92.2 | 65.0 | 48.7 | 176.1 | 84.8 | 67.5 |
| Over 25% poverty | 69.0 | 126.9 | 96.8 | 66.4 | 74.4 | 73.3 |
| Urban | 78.4 | 109.9 | 36.4 | 262.0 | 81.7 | 72.4 |
| Suburban | 88.7 | 103.4 | 70.9 | 144.8 | 89.5 | 64.7 |
| Rural | 84.2 | 60.4 | 70.4 | 93.0 | 84.0 | 54.9 |
| PRIVATE SCHOOLS | | | | | | |
| Catholic schools | 60.4 | 59.7 | 5.3 | NA | 63.4 | 73.5 |
| Private schools | 42.9 | 34.8 | 22.4 | NA | 46.4 | 40.5 |

# MASSACHUSETTS

Massachusetts Dept. of Education
Quincy Center Plaza
Qunicy, MA 02169
617/770-7340

Superintendent:

Dr. John H. Lawson

CAI Coordinator(s):

John LeBaron

| | |
|---|---|
| Number of districts: | 415 |
| Number of public schools: | 1,805 |
| Number of Catholic schools: | 311 |
| Number of private schools: | 447 |

State Ranking (Of 50 States & Wash. D.C.)

| | |
|---|---|
| % districts using micros: | 39 |
| % public schools using micros: | 20 |
| Number of microcomputers:* | 14 |
| Micro-Intensity (of schools using microcomputers): | 26 |

Microcomputers Installed:*

| By school type | | % by brand | |
|---|---|---|---|
| Elementary: | 5,345 | Apple: | 55.6 |
| Junior High: | 2,311 | Commodore: | 10.5 |
| Senior High: | 5,173 | Radio Shack: | 19.7 |
| Total: | 12,941 | Other: | 14.2 |

*Forecast based on 78.0 % of schools using microcomputers in the state.

| | STATE FALL '84 | | STATE FALL '83 | | NATIONAL COMPARISON FALL '84 | |
|---|---|---|---|---|---|---|
| | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity |
| PUBLIC SCHOOLS | | | | | | |
| Districts | 91.3 | 73.6 | 84.8 | NA | 94.2 | NA |
| All Schools | 87.0 | 61.9 | 71.2 | 81.1 | 85.1 | 63.5 |
| Elementary | 84.3 | 68.5 | 65.4 | 88.6 | 82.2 | 79.3 |
| Junior High | 94.9 | 59.9 | 81.3 | 86.4 | 93.1 | 61.2 |
| Senior High | 97.4 | 55.9 | 91.8 | 70.9 | 94.6 | 51.5 |
| 0-4.9% poverty | 97.7 | 51.8 | 79.5 | 72.3 | 91.7 | 54.4 |
| 5-11.9% poverty | 87.9 | 63.6 | 69.8 | 80.4 | 91.9 | 62.0 |
| 12-24.9% poverty | 79.6 | 68.9 | 64.2 | 117.4 | 84.8 | 67.5 |
| Over 25% poverty | 82.9 | 72.7 | 0.0 | 0.0 | 74.4 | 73.3 |
| Urban | 81.1 | 64.1 | 63.9 | 84.6 | 81.7 | 72.4 |
| Suburban | 92.5 | 61.2 | 77.5 | 84.0 | 89.5 | 64.7 |
| Rural | 86.7 | 59.1 | 72.6 | 69.5 | 84.0 | 54.9 |
| PRIVATE SCHOOLS | | | | | | |
| Catholic schools | 71.7 | 93.4 | 18.7 | NA | 63.4 | 73.5 |
| Private schools | 41.8 | 36.3 | 25.1 | NA | 46.4 | 40.5 |

Michigan Dept. of Education
520 Michigan Ntnl. Tower
Lansing, MI 48933
517/373-3324

Superintendent:

Dr. Phillip E. Runkel

CAI Coordinator(s):

Edward L. Birch
Dr. James L. Phelps

| | |
|---|---|
| Number of districts: | 539 |
| Number of public schools: | 3,297 |
| Number of Catholic schools: | 400 |
| Number of private schools: | 606 |

State Ranking (Of 50 States & Wash. D.C.)

| | |
|---|---|
| % districts using micros: | 10 |
| % public schools using micros: | 15 |
| Number of microcomputers:* | 6 |
| Micro-Intensity (of schools using microcomputers): | 31 |

Microcomputers Installed:*

| By school type | | % by brand | |
|---|---|---|---|
| Elementary: | 9,341 | Apple: | 44.7 |
| Junior High: | 4,606 | Commodore: | 24.8 |
| Senior High: | 9,755 | Radio Shack: | 16.6 |
| Total: | 24,307 | Other: | 13.9 |

*Forecast based on 83.7 % of schools using microcomputers in the state.

| | STATE FALL '84 | | STATE FALL '83 | | NATIONAL COMPARISON FALL '84 | |
|---|---|---|---|---|---|---|
| | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity |
| PUBLIC SCHOOLS | | | | | | |
| Districts | 99.4 | 68.8 | 95.6 | NA | 94.2 | NA |
| All Schools | 89.3 | 63.6 | 78.4 | 90.6 | 85.1 | 63.5 |
| Elementary | 89.4 | 78.4 | 76.5 | 104.1 | 82.2 | 79.3 |
| Junior High | 94.2 | 58.8 | 86.4 | 85.9 | 93.1 | 61.2 |
| Senior High | 95.6 | 51.8 | 89.6 | 77.4 | 94.6 | 51.5 |
| 0-4.9% poverty | 93.5 | 51.2 | 85.7 | 80.4 | 91.7 | 54.4 |
| 5-11.9% poverty | 91.0 | 74.9 | 79.2 | 99.3 | 91.9 | 62.0 |
| 12-24.9% poverty | 88.8 | 60.0 | 75.7 | 85.9 | 84.8 | 67.5 |
| Over 25% poverty | 93.6 | 66.9 | 86.2 | 67.4 | 74.4 | 73.3 |
| Urban | 87.0 | 89.0 | 77.9 | 122.7 | 81.7 | 72.4 |
| Suburban | 90.2 | 57.2 | 80.2 | 78.2 | 89.5 | 64.7 |
| Rural | 90.1 | 56.0 | 76.4 | 82.3 | 84.0 | 54.9 |
| PRIVATE SCHOOLS | | | | | | |
| Catholic schools | 72.3 | 75.7 | 16.0 | NA | 63.4 | 73.5 |
| Private schools | 57.9 | 46.3 | 31.6 | NA | 46.4 | 40.5 |

# MINNESOTA

Minnesota Dept. of Education
550 Cedar St.
St. Paul, MN 55101
612/296-6104

Superintendent:

Dr. Rugh E. Randall

CAI Coordinator(s):

Wayne Erickson
Harold MacDermot

| | |
|---|---|
| Number of districts: | 471 |
| Number of public schools: | 1,432 |
| Number of Catholic schools: | 252 |
| Number of private schools: | 302 |

State Ranking (Of 50 States & Wash. D.C.)

| | |
|---|---|
| % districts using micros: | 14 |
| % public schools using micros: | 1 |
| Number of microcomputers:* | 11 |
| Micro-Intensity (of schools using microcomputers): | 3 |

Microcomputers Installed:*

| By school type | | % by brand | |
|---|---|---|---|
| Elementary: | 7,141 | Apple: | 81.1 |
| Junior High: | 2,700 | Commodore: | 5.7 |
| Senior High: | 7,231 | Radio Shack: | 2.0 |
| Total: | 19,328 | Other: | 11.2 |

*Forecast based on 82.1 % of schools using microcomputers in the state.

| | STATE FALL '84 | | STATE FALL '83 | | NATIONAL COMPARISON FALL '84 | |
|---|---|---|---|---|---|---|
| | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity |
| PUBLIC SCHOOLS | | | | | | |
| Districts | 99.2 | 35.9 | 97.1 | NA | 94.2 | NA |
| All Schools | 98.3 | 35.8 | 92.8 | 56.5 | 85.1 | 63.5 |
| Elementary | 98.4 | 44.3 | 91.2 | 67.2 | 82.2 | 79.3 |
| Junior High | 100.0 | 34.9 | 98.5 | 65.7 | 93.1 | 61.2 |
| Senior High | 98.8 | 30.0 | 95.8 | 46.2 | 94.6 | 51.5 |
| 0-4.9% poverty | 98.0 | 36.1 | 98.4 | 61.7 | 91.7 | 54.4 |
| 5-11.9% poverty | 98.3 | 33.7 | 90.7 | 61.2 | 91.9 | 62.0 |
| 12-24.9% poverty | 98.5 | 37.8 | 92.9 | 45.5 | 84.8 | 67.5 |
| Over 25% poverty | 100.0 | 26.8 | 95.8 | 45.2 | 74.4 | 73.3 |
| Urban | 98.6 | 40.0 | 93.9 | 70.4 | 81.7 | 72.4 |
| Suburban | 98.0 | 32.9 | 95.3 | 60.7 | 89.5 | 64.7 |
| Rural | 98.3 | 33.6 | 91.8 | 49.0 | 84.0 | 54.9 |
| PRIVATE SCHOOLS | | | | | | |
| Catholic schools | 70.6 | 77.2 | 35.4 | NA | 63.4 | 73.5 |
| Private schools | 68.2 | 43.5 | 41.4 | NA | 46.4 | 40.5 |

Mississippi Dept. of Education
Sillers State Office Bldg.
Jackson, MS 39205
601/359-3513

Superintendent:

Dr. Richard A. Boyd

CAI Coordinator(s):

Dollie Mosley

| | |
|---|---|
| Number of districts: | 159 |
| Number of public schools: | 940 |
| Number of Catholic schools: | 45 |
| Number of private schools: | 139 |

State Ranking (Of 50 States & Wash. D.C.)

| | |
|---|---|
| % districts using micros: | 41 |
| % public schools using micros: | 49 |
| Number of microcomputers:* | 39 |
| Micro-Intensity (of schools using microcomputers): | 47 |

Microcomputers Installed:*

| By school type | | % by brand | |
|---|---|---|---|
| Elementary: | 1,162 | Apple: | 18.9 |
| Junior High: | 419 | Commodore: | 18.3 |
| Senior High: | 1,663 | Radio Shack: | 25.8 |
| Total: | 3,607 | Other: | 37.0 |

*Forecast based on 71.8 % of schools using microcomputers in the state.

| | STATE FALL '84 | | STATE FALL '83 | | NATIONAL COMPARISON FALL '84 | |
|---|---|---|---|---|---|---|
| | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity |
| PUBLIC SCHOOLS | | | | | | |
| Districts | 89.3 | 109.5 | 64.8 | NA | 94.2 | NA |
| All Schools | 66.4 | 97.1 | 36.2 | 135.1 | 85.1 | 63.5 |
| Elementary | 58.7 | 115.3 | 26.7 | 197.8 | 82.2 | 79.3 |
| Junior High | 74.4 | 99.2 | 52.3 | 103.4 | 93.1 | 61.2 |
| Senior High | 84.0 | 73.1 | 54.8 | 105.3 | 94.6 | 51.5 |
| 0-4.9% poverty | 64.7 | 0.0 | 0.0 | 54.4 | 91.7 | 54.4 |
| 5-11.9% poverty | 81.3 | 51.5 | 100.0 | 0.0 | 91.9 | 62.0 |
| 12-24.9% poverty | 65.5 | 102.2 | 29.0 | 79.2 | 84.8 | 67.5 |
| Over 25% poverty | 67.4 | 99.8 | 36.6 | 144.5 | 74.4 | 73.3 |
| Urban | 82.3 | 65.4 | 30.9 | 67.4 | 81.7 | 72.4 |
| Suburban | 70.0 | 83.4 | 7.5 | 478.0 | 89.5 | 64.7 |
| Rural | 64.8 | 108.9 | 38.4 | 163.5 | 84.0 | 54.9 |
| PRIVATE SCHOOLS | | | | | | |
| Catholic schools | 40.0 | 70.3 | 15.2 | NA | 63.4 | 73.5 |
| Private schools | 54.0 | 74.6 | 12.2 | NA | 46.4 | 40.5 |

# MISSOURI

Missouri Dept. of Education
100 E. Capitol Ave.
Jefferson City, MO 65101
314/751-3469

Superintendent:

Dr. Arthur Mallory

CAI Coordinator(s):

Thomas Odneal
Dr. Richard King

| | |
|---|---|
| Number of districts: | 548 |
| Number of public schools: | 2,033 |
| Number of Catholic schools: | 324 |
| Number of private schools: | 257 |

State Ranking (Of 50 States & Wash. D.C.)

| | |
|---|---|
| % districts using micros: | 40 |
| % public schools using micros: | 41 |
| Number of microcomputers:* | 18 |
| Micro-Intensity (of schools using microcomputers): | 38 |

Microcomputers Installed:*

| By school type | | % by brand | |
|---|---|---|---|
| Elementary: | 3,776 | Apple: | 49.3 |
| Junior High: | 1,557 | Commodore: | 13.1 |
| Senior High: | 4,720 | Radio Shack: | 18.9 |
| Total: | 10,613 | Other: | 18.7 |

*Forecast based on 88.4 % of schools using microcomputers in the state.

| | STATE FALL '84 | | STATE FALL '83 | | NATIONAL COMPARISON FALL '84 | |
|---|---|---|---|---|---|---|
| | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity |
| PUBLIC SCHOOLS | | | | | | |
| Districts | 90.9 | 68.7 | 74.9 | NA | 94.2 | NA |
| All Schools | 78.3 | 66.0 | 55.6 | 93.6 | 85.1 | 63.5 |
| Elementary | 72.6 | 80.5 | 44.6 | 118.3 | 82.2 | 79.3 |
| Junior High | 85.1 | 68.5 | 62.2 | 95.0 | 93.1 | 61.2 |
| Senior High | 96.5 | 54.9 | 82.1 | 76.8 | 94.6 | 51.5 |
| 0-4.9% poverty | 89.0 | 58.2 | 68.5 | 109.4 | 91.7 | 54.4 |
| 5-11.9% poverty | 89.0 | 71.3 | 58.1 | 89.5 | 91.9 | 62.0 |
| 12-24.9% poverty | 77.7 | 66.6 | 58.4 | 88.9 | 84.8 | 67.5 |
| Over 25% poverty | 65.6 | 66.8 | 48.1 | 91.8 | 74.4 | 73.3 |
| Urban | 70.0 | 68.2 | 63.4 | 88.3 | 81.7 | 72.4 |
| Suburban | 85.3 | 69.0 | 55.3 | 118.9 | 89.5 | 64.7 |
| Rural | 79.3 | 61.0 | 51.9 | 82.9 | 84.0 | 54.9 |
| PRIVATE SCHOOLS | | | | | | |
| Catholic schools | 65.7 | 71.4 | 29.1 | NA | 63.4 | 73.5 |
| Private schools | 46.3 | 35.3 | 20.9 | NA | 46.4 | 40.5 |

Montana Dept. of Education
State Capitol
Helena, MT 59620
406/444-3654

Superintendent:

Ed Engenbright

CAI Coordinator(s):

Daniel Dolan

| | |
|---|---|
| Number of districts: | 393 |
| Number of public schools: | 717 |
| Number of Catholic schools: | 26 |
| Number of private schools: | 70 |

State Ranking (Of 50 States & Wash. D.C.)

| | |
|---|---|
| % districts using micros: | 49 |
| % public schools using micros: | 33 |
| Number of microcomputers:* | 38 |
| Micro-Intensity (of schools using microcomputers): | 5 |

Microcomputers Installed:*

| By school type | | % by brand | |
|---|---|---|---|
| Elementary: | 1,347 | Apple: | 54.4 |
| Junior High: | 407 | Commodore: | 18.2 |
| Senior High: | 1,430 | Radio Shack: | 16.1 |
| Total: | 3,622 | Other: | 11.3 |

*Forecast based on 88.6 % of schools using microcomputers in the state.

| | STATE FALL '84 | | STATE FALL '83 | | NATIONAL COMPARISON FALL '84 | |
|---|---|---|---|---|---|---|
| | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity |
| PUBLIC SCHOOLS | | | | | | |
| Districts | 74.3 | 36.9 | 64.6 | NA | 94.2 | NA |
| All Schools | 82.0 | 41.0 | 74.9 | 54.4 | 85.1 | 63.5 |
| Elementary | 73.5 | 56.1 | 64.8 | 69.8 | 82.2 | 79.3 |
| Junior High | 98.2 | 51.8 | 89.1 | 64.3 | 93.1 | 61.2 |
| Senior High | 100.0 | 27.7 | 98.4 | 39.5 | 94.6 | 51.5 |
| 0-4.9% poverty | 75.4 | 42.6 | 79.3 | 57.9 | 91.7 | 54.4 |
| 5-11.9% poverty | 89.4 | 51.7 | 79.1 | 64.7 | 91.9 | 62.0 |
| 12-24.9% poverty | 89.7 | 33.5 | 69.8 | 42.8 | 84.8 | 67.5 |
| Over 25% poverty | 67.9 | 24.3 | 77.3 | 31.6 | 74.4 | 73.3 |
| Urban | 89.8 | 62.3 | 83.9 | 93.4 | 81.7 | 72.4 |
| Suburban | 100.0 | 31.6 | 95.7 | 41.5 | 89.5 | 64.7 |
| Rural | 81.2 | 37.1 | 73.7 | 46.9 | 84.0 | 54.9 |
| PRIVATE SCHOOLS | | | | | | |
| Catholic schools | 84.6 | 63.2 | 40.0 | NA | 63.4 | 73.5 |
| Private schools | 45.7 | 28.6 | 24.7 | NA | 46.4 | 40.5 |

Nebraska Dept. of Education
301 Centennial Mall So.
Lincoln, NE 68509
402/471-2295

Superintendent:

Dr. Joe E. Lutjeharms

CAI Coordinator(s):

William McKay
Donald Niemann

| | |
|---|---|
| Number of districts: | 322 |
| Number of public schools: | 1,466 |
| Number of Catholic schools: | 123 |
| Number of private schools: | 117 |

State Ranking (Of 50 States & Wash. D.C.)

| | |
|---|---|
| % districts using micros: | 15 |
| % public schools using micros: | 51 |
| Number of microcomputers:* | 34 |
| Micro-Intensity (of schools using microcomputers): | 11 |

Microcomputers Installed:*

| By school type | | % by brand | |
|---|---|---|---|
| Elementary: | 2,070 | Apple: | 82.7 |
| Junior High: | 666 | Commodore: | 3.3 |
| Senior High: | 1,783 | Radio Shack: | 8.0 |
| Total: | 5,539 | Other: | 6.0 |

*Forecast based on 81.6 % of schools using microcomputers in the state.

| | STATE FALL '84 | | STATE FALL '83 | | NATIONAL COMPARISON FALL '84 | |
|---|---|---|---|---|---|---|
| | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity |
| PUBLIC SCHOOLS | | | | | | |
| Districts | 99.1 | 52.4 | 96.0 | NA | 94.2 | NA |
| All Schools | 61.3 | 48.2 | 55.3 | 70.1 | 85.1 | 63.5 |
| Elementary | 47.9 | 69.2 | 40.5 | 95.1 | 82.2 | 79.3 |
| Junior High | 100.0 | 53.4 | 95.2 | 89.4 | 93.1 | 61.2 |
| Senior High | 98.8 | 35.3 | 97.1 | 48.8 | 94.6 | 51.5 |
| 0-4.9% poverty | 96.6 | 54.8 | 91.8 | 67.5 | 91.7 | 54.4 |
| 5-11.9% poverty | 95.2 | 47.3 | 88.8 | 78.8 | 91.9 | 62.0 |
| 12-24.9% poverty | 94.1 | 52.0 | 86.9 | 58.6 | 84.8 | 67.5 |
| Over 25% poverty | 96.3 | 31.1 | 91.5 | 52.5 | 74.4 | 73.3 |
| Urban | 94.1 | 59.5 | 91.7 | 92.3 | 81.7 | 72.4 |
| Suburban | 92.5 | 54.8 | 83.3 | 69.2 | 89.5 | 64.7 |
| Rural | 55.2 | 41.7 | 48.7 | 61.9 | 84.0 | 54.9 |
| PRIVATE SCHOOLS | | | | | | |
| Catholic schools | 61.8 | 67.5 | 23.8 | NA | 63.4 | 73.5 |
| Private schools | 46.2 | 40.8 | 26.8 | NA | 46.4 | 40.5 |

Nevada Dept. of Education
400 We. King St.
Carson City, NV 89710
702/885-3130

Superintendent:

Ted Sanders

CAI Coordinator(s):

Aldo Raminez

| | |
|---|---|
| Number of districts: | 17 |
| Number of public schools: | 286 |
| Number of Catholic schools: | 18 |
| Number of private schools: | 37 |

State Ranking (Of 50 States & Wash. D.C.)

| | |
|---|---|
| % districts using micros: | 2 |
| % public schools using micros: | 46 |
| Number of microcomputers:* | 47 |
| Micro-Intensity (of schools using microcomputers): | 34 |

Microcomputers Installed:*

| By school type | | % by brand | |
|---|---|---|---|
| Elementary: | 579 | Apple: | 49.8 |
| Junior High: | 595 | Commodore: | 20.3 |
| Senior High: | 769 | Radio Shack: | 6.3 |
| Total: | 2,021 | Other: | 23.6 |

*Forecast based on 74.2 % of schools using microcomputers in the state.

| | STATE FALL '84 | | STATE FALL '83 | | NATIONAL COMPARISON FALL '84 | |
|---|---|---|---|---|---|---|
| | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity |
| PUBLIC SCHOOLS | | | | | | |
| Districts | 100.0 | 29.3 | 94.1 | NA | 94.2 | NA |
| All Schools | 74.5 | 64.5 | 50.2 | 91.2 | 85.1 | 63.5 |
| Elementary | 63.0 | 87.2 | 29.9 | 134.5 | 82.2 | 79.3 |
| Junior High | 97.4 | 52.9 | 95.0 | 67.5 | 93.1 | 61.2 |
| Senior High | 97.8 | 55.5 | 91.1 | 95.5 | 94.6 | 51.5 |
| 0-4.9% poverty | 0.0 | 18.6 | 0.0 | 0.0 | 91.7 | 54.4 |
| 5-11.9% poverty | 73.6 | 66.3 | 49.2 | 95.4 | 91.9 | 62.0 |
| 12-24.9% poverty | 75.5 | 55.1 | 58.6 | 60.8 | 84.8 | 67.5 |
| Over 25% poverty | 100.0 | 19.3 | 0.0 | 0.0 | 74.4 | 73.3 |
| Urban | 62.4 | 87.6 | 34.7 | 115.3 | 81.7 | 72.4 |
| Suburban | 72.7 | 54.0 | 54.6 | 55.0 | 89.5 | 64.7 |
| Rural | 85.0 | 45.4 | 53.7 | 83.5 | 84.0 | 54.9 |
| PRIVATE SCHOOLS | | | | | | |
| Catholic schools | 55.6 | 52.4 | 16.7 | NA | 63.4 | 73.5 |
| Private schools | 40.5 | 16.5 | 16.2 | NA | 46.4 | 40.5 |

New Hampshire Dept. of Education
410 State House Annex
Concord, NH 03301
603/271-3189

Superintendent:

Dr. Robert L. Brunelle

CAI Coordinator(s):

Fernand J. Prevost

| | |
|---|---|
| Number of districts: | 212 |
| Number of public schools: | 439 |
| Number of Catholic schools: | 48 |
| Number of private schools: | 81 |

State Ranking (Of 50 States & Wash. D.C.)

| | |
|---|---|
| % districts using micros: | 50 |
| % public schools using micros: | 18 |
| Number of microcomputers:* | 46 |
| Micro-Intensity (of schools using microcomputers): | 39 |

Microcomputers Installed:*

| By school type | | % by brand | |
|---|---|---|---|
| Elementary: | 1,066 | Apple: | 46.7 |
| Junior High: | 253 | Commodore: | 17.4 |
| Senior High: | 788 | Radio Shack: | 21.6 |
| Total: | 2,174 | Other: | 14.3 |

*Forecast based on 70.1 % of schools using microcomputers in the state.

| | STATE FALL '84 | | STATE FALL '83 | | NATIONAL COMPARISON FALL '84 | |
|---|---|---|---|---|---|---|
| | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity |
| PUBLIC SCHOOLS | | | | | | |
| Districts | 72.6 | 67.2 | 68.9 | NA | 94.2 | NA |
| All Schools | 87.7 | 66.7 | 79.2 | 91.3 | 85.1 | 63.5 |
| Elementary | 84.6 | 65.7 | 74.2 | 87.3 | 82.2 | 79.3 |
| Junior High | 92.3 | 76.0 | 86.8 | 117.2 | 93.1 | 61.2 |
| Senior High | 100.0 | 65.6 | 98.5 | 87.1 | 94.6 | 51.5 |
| 0-4.9% poverty | 91.6 | 53.2 | 85.9 | 97.4 | 91.7 | 54.4 |
| 5-11.9% poverty | 88.2 | 79.5 | 76.5 | 91.0 | 91.9 | 62.0 |
| 12-24.9% poverty | 84.9 | 64.0 | 86.7 | 74.9 | 84.8 | 67.5 |
| Over 25% poverty | 100.0 | 32.0 | 83.3 | 126.7 | 74.4 | 73.3 |
| Urban | 69.2 | 92.5 | 60.9 | 145.5 | 81.7 | 72.4 |
| Suburban | 100.0 | 71.7 | 90.2 | 88.0 | 89.5 | 64.7 |
| Rural | 89.7 | 58.0 | 81.2 | 82.9 | 84.0 | 54.9 |
| PRIVATE SCHOOLS | | | | | | |
| Catholic schools | 72.9 | 76.4 | 56.0 | NA | 63.4 | 73.5 |
| Private schools | 46.9 | 48.6 | 31.7 | NA | 46.4 | 40.5 |

Nerw Jersey Dept. of Education
225 W. State St.
Trenton, NJ 08625
609/292-4040

Superintendent:

Saul Cooperman

CAI Coordinator(s):

Richard B. Harnack

| | |
|---|---|
| Number of districts: | 587 |
| Number of public schools: | 2,278 |
| Number of Catholic schools: | 535 |
| Number of private schools: | 306 |

State Ranking (Of 50 States & Wash. D.C.)

| | |
|---|---|
| % districts using micros: | 23 |
| % public schools using micros: | 21 |
| Number of microcomputers:* | 9 |
| Micro-Intensity (of schools using microcomputers): | 20 |

Microcomputers Installed:*

| By school type | | % by brand | |
|---|---|---|---|
| Elementary: | 9,105 | Apple: | 43.9 |
| Junior High: | 2,679 | Commodore: | 19.4 |
| Senior High: | 8,640 | Radio Shack: | 20.5 |
| Total: | 20,576 | Other: | 16.2 |

*Forecast based on 76.3 % of schools using microcomputers in the state.

| | STATE FALL '84 | | STATE FALL '83 | | NATIONAL COMPARISON FALL '84 | |
|---|---|---|---|---|---|---|
| | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity |
| PUBLIC SCHOOLS | | | | | | |
| Districts | 98.0 | 55.6 | 88.1 | NA | 94.2 | NA |
| All Schools | 86.8 | 53.9 | 74.3 | 68.4 | 85.1 | 63.5 |
| Elementary | 86.6 | 59.4 | 71.5 | 71.0 | 82.2 | 79.3 |
| Junior High | 94.3 | 52.3 | 86.4 | 57.5 | 93.1 | 61.2 |
| Senior High | 92.0 | 46.7 | 88.3 | 69.3 | 94.6 | 51.5 |
| 0-4.9% poverty | 89.8 | 46.4 | 81.9 | 58.8 | 91.7 | 54.4 |
| 5-11.9% poverty | 92.5 | 50.5 | 76.0 | 67.8 | 91.9 | 62.0 |
| 12-24.9% poverty | 87.8 | 59.3 | 79.6 | 101.0 | 84.8 | 67.5 |
| Over 25% poverty | 67.9 | 101.2 | 20.9 | 60.2 | 74.4 | 73.3 |
| Urban | 69.1 | 78.9 | 63.6 | 103.4 | 81.7 | 72.4 |
| Suburban | 90.3 | 47.9 | 75.8 | 55.3 | 89.5 | 64.7 |
| Rural | 90.1 | 54.9 | 78.0 | 79.2 | 84.0 | 54.9 |
| PRIVATE SCHOOLS | | | | | | |
| Catholic schools | 38.1 | 58.7 | 7.0 | NA | 63.4 | 73.5 |
| Private schools | 55.6 | 35.0 | 34.5 | NA | 46.4 | 40.5 |

New Mexico Dept. of Education
300 Don Gasper St.
Santa Fe, NM 87503
505/827-6635

Superintendent:

Leonard J. DeLayo

CAI Coordinator(s):

Bill Trujillo

| | |
|---|---|
| Number of districts: | 92 |
| Number of public schools: | 619 |
| Number of Catholic schools: | 40 |
| Number of private schools: | 97 |

State Ranking (Of 50 States & Wash. D.C.)

| | |
|---|---|
| % districts using micros: | 20 |
| % public schools using micros: | 40 |
| Number of microcomputers:* | 36 |
| Micro-Intensity (of schools using microcomputers): | 8 |

Microcomputers Installed:*

| By school type | | % by brand | |
|---|---|---|---|
| Elementary: | 1,765 | Apple: | 66.9 |
| Junior High: | 1,049 | Commodore: | 10.9 |
| Senior High: | 1,819 | Radio Shack: | 13.1 |
| Total: | 4,756 | Other: | 9.1 |

*Forecast based on 88.0 % of schools using microcomputers in the state.

| | STATE FALL '84 | | STATE FALL '83 | | NATIONAL COMPARISON FALL '84 | |
|---|---|---|---|---|---|---|
| | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity |
| PUBLIC SCHOOLS | | | | | | |
| Districts | 98.9 | 57.4 | 87.1 | NA | 94.2 | NA |
| All Schools | 79.5 | 46.1 | 58.9 | 90.2 | 85.1 | 63.5 |
| Elementary | 73.8 | 50.7 | 48.0 | 111.4 | 82.2 | 79.3 |
| Junior High | 93.8 | 47.7 | 79.8 | 119.4 | 93.1 | 61.2 |
| Senior High | 90.2 | 41.2 | 82.1 | 69.6 | 94.6 | 51.5 |
| 0-4.9% poverty | 51.9 | 18.1 | 100.0 | 19.0 | 91.7 | 54.4 |
| 5-11.9% poverty | 92.3 | 33.2 | 66.7 | 78.9 | 91.9 | 62.0 |
| 12-24.9% poverty | 81.8 | 48.4 | 58.3 | 145.6 | 84.8 | 67.5 |
| Over 25% poverty | 82.6 | 40.1 | 58.3 | 58.1 | 74.4 | 73.3 |
| Urban | 85.4 | 48.7 | 64.1 | 195.8 | 81.7 | 72.4 |
| Suburban | 60.0 | 35.7 | 40.0 | 278.0 | 89.5 | 64.7 |
| Rural | 77.9 | 42.4 | 58.2 | 56.0 | 84.0 | 54.9 |
| PRIVATE SCHOOLS | | | | | | |
| Catholic schools | 60.0 | 83.1 | 7.1 | NA | 63.4 | 73.5 |
| Private schools | 40.2 | 29.9 | 28.3 | NA | 46.4 | 40.5 |

New York Dept. of Education
89 Washington Ave.
Albany, NY 12234

Superintendent:

Gordon M. Ambach

CAI Coordinator(s):

Gregory Benson

| | |
|---|---|
| Number of districts: | 771 |
| Number of public schools: | 3,993 |
| Number of Catholic schools: | 1,050 |
| Number of private schools: | 932 |

State Ranking (Of 50 States & Wash. D.C.)

| | |
|---|---|
| % districts using micros: | 22 |
| % public schools using micros: | 12 |
| Number of microcomputers:* | 2 |
| Micro-Intensity (of schools using microcomputers): | 37 |

Microcomputers Installed:*

| By school type | | % by brand | |
|---|---|---|---|
| Elementary: | 14,456 | Apple: | 40.3 |
| Junior High: | 6,178 | Commodore: | 25.9 |
| Senior High: | 14,937 | Radio Shack: | 20.3 |
| Total: | 38,524 | Other: | 13.5 |

*Forecast based on 74.3 % of schools using microcomputers in the state.

| | STATE FALL '84 | | STATE FALL '83 | | NATIONAL COMPARISON FALL '84 | |
|---|---|---|---|---|---|---|
| | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity |
| PUBLIC SCHOOLS | | | | | | |
| Districts | 98.6 | 68.8 | 95.9 | NA | 94.2 | NA |
| All Schools | 90.1 | 65.3 | 78.7 | 91.9 | 85.1 | 63.5 |
| Elementary | 89.8 | 78.3 | 74.9 | 100.1 | 82.2 | 79.3 |
| Junior High | 93.0 | 65.3 | 84.4 | 85.4 | 93.1 | 61.2 |
| Senior High | 96.1 | 56.6 | 91.2 | 92.9 | 94.6 | 51.5 |
| 0-4.9% poverty | 95.0 | 56.1 | 87.2 | 99.1 | 91.7 | 54.4 |
| 5-11.9% poverty | 96.7 | 58.5 | 80.3 | 79.3 | 91.9 | 62.0 |
| 12-24.9% poverty | 87.0 | 61.5 | 73.3 | 92.4 | 84.8 | 67.5 |
| Over 25% poverty | 82.2 | 101.0 | 66.5 | 128.5 | 74.4 | 73.3 |
| Urban | 85.6 | 84.4 | 72.3 | 121.9 | 81.7 | 72.4 |
| Suburban | 89.4 | 69.9 | 78.3 | 94.4 | 89.5 | 64.7 |
| Rural | 97.4 | 41.4 | 88.1 | 62.9 | 84.0 | 54.9 |
| PRIVATE SCHOOLS | | | | | | |
| Catholic schools | 69.1 | 63.3 | 27.6 | NA | 63.4 | 73.5 |
| Private schools | 51.3 | 41.2 | 27.3 | NA | 46.4 | 40.5 |

North Carolina Dept. of Education
114 W. Adenton St.
Raleigh, NC 27611
919-733-4258

Superintendent:

Dr. A. Craig Phillips

CAI Coordinator(s):

Margaret Bingham

| | |
|---|---|
| Number of districts: | 144 |
| Number of public schools: | 1,995 |
| Number of Catholic schools: | 40 |
| Number of private schools: | 262 |

State Ranking (Of 50 States & Wash. D.C.)

| | |
|---|---|
| % districts using micros: | 11 |
| % public schools using micros: | 9 |
| Number of microcomputers:* | 15 |
| Micro-Intensity (of schools using microcomputers): | 44 |

Microcomputers Installed:*

| By school type | | % by brand | |
|---|---|---|---|
| Elementary: | 4,980 | Apple: | 47.6 |
| Junior High: | 2,616 | Commodore: | 2.0 |
| Senior High: | 4,847 | Radio Shack: | 36.0 |
| Total: | 12,740 | Other: | 14.4 |

*Forecast based on 84.9 % of schools using microcomputers in the state.

| | STATE FALL '84 | | STATE FALL '83 | | NATIONAL COMPARISON FALL '84 | |
|---|---|---|---|---|---|---|
| | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity |
| PUBLIC SCHOOLS | | | | | | |
| Districts | 99.3 | 67.0 | 97.9 | NA | 94.2 | NA |
| All Schools | 92.6 | 83.8 | 72.9 | 141.2 | 85.1 | 63.5 |
| Elementary | 90.6 | 108.0 | 65.0 | 204.7 | 82.2 | 79.3 |
| Junior High | 97.7 | 82.4 | 85.0 | 137.1 | 93.1 | 61.2 |
| Senior High | 98.2 | 60.6 | 95.8 | 97.3 | 94.6 | 51.5 |
| 0-4.9% poverty | 100.0 | 0.0 | 0.0 | 89.9 | 91.7 | 54.4 |
| 5-11.9% poverty | 98.9 | 91.7 | 78.3 | 170.7 | 91.9 | 62.0 |
| 12-24.9% poverty | 92.0 | 78.4 | 72.5 | 150.4 | 84.8 | 67.5 |
| Over 25% poverty | 86.5 | 99.7 | 71.4 | 125.0 | 74.4 | 73.3 |
| Urban | 91.2 | 70.1 | 79.3 | 157.1 | 81.7 | 72.4 |
| Suburban | 91.8 | 80.4 | 81.7 | 151.7 | 89.5 | 64.7 |
| Rural | 93.2 | 90.7 | 68.6 | 133.4 | 84.0 | 54.9 |
| PRIVATE SCHOOLS | | | | | | |
| Catholic schools | 60.0 | 93.1 | 51.3 | NA | 63.4 | 73.5 |
| Private schools | 46.2 | 41.7 | 20.5 | NA | 46.4 | 40.5 |

North Dakota Dept. of Education
State Capitol Bldg.
Bismarck, ND 58505
701/224-2261

Superintendent:

Dr. Joseph C. Crawford

CAI Coordinator(s):

Dr. Gary Gronberg
Dr. Ronald Torgeson

| | |
|---|---|
| Number of districts: | 290 |
| Number of public schools: | 503 |
| Number of Catholic schools: | 41 |
| Number of private schools: | 23 |

State Ranking (Of 50 States & Wash. D.C.)

| | |
|---|---|
| % districts using micros: | 44 |
| % public schools using micros: | 22 |
| Number of microcomputers:* | 45 |
| Micro-Intensity (of schools using microcomputers): | 14 |

Microcomputers Installed:*

| By school type | | % by brand | |
|---|---|---|---|
| Elementary: | 514 | Apple: | 59.2 |
| Junior High: | 188 | Commodore: | 5.5 |
| Senior High: | 749 | Radio Shack: | 19.6 |
| Total: | 2,303 | Other: | 15.7 |

*Forecast based on 93.3 % of schools using microcomputers in the state.

| | STATE FALL '84 | | STATE FALL '83 | | NATIONAL COMPARISON FALL '84 | |
|---|---|---|---|---|---|---|
| | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity |
| PUBLIC SCHOOLS | | | | | | |
| Districts | 87.6 | 50.9 | 78.7 | NA | 94.2 | NA |
| All Schools | 86.7 | 48.6 | 74.0 | 65.2 | 85.1 | 63.5 |
| Elementary | 76.8 | 83.8 | 57.3 | 116.6 | 82.2 | 79.3 |
| Junior High | 90.5 | 56.8 | 80.0 | 55.7 | 93.1 | 61.2 |
| Senior High | 96.5 | 36.7 | 94.3 | 50.0 | 94.6 | 51.5 |
| 0-4.9% poverty | 89.6 | 41.1 | 94.4 | 90.1 | 91.7 | 54.4 |
| 5-11.9% poverty | 87.1 | 65.6 | 66.9 | 78.8 | 91.9 | 62.0 |
| 12-24.9% poverty | 89.8 | 35.1 | 78.3 | 54.0 | 84.8 | 67.5 |
| Over 25% poverty | 82.5 | 34.7 | 72.3 | 50.0 | 74.4 | 73.3 |
| Urban | 84.8 | 70.7 | 87.1 | 93.5 | 81.7 | 72.4 |
| Suburban | 80.4 | 53.6 | 60.7 | 63.9 | 89.5 | 64.7 |
| Rural | 87.3 | 38.2 | 74.8 | 55.0 | 84.0 | 54.9 |
| PRIVATE SCHOOLS | | | | | | |
| Catholic schools | 70.7 | 53.8 | 28.6 | NA | 63.4 | 73.5 |
| Private schools | 43.5 | 29.5 | 9.5 | NA | 46.4 | 40.5 |

Ohio Dept. of Education
65 S. Front St.
Columbus, OH 43215
614/466-3304

Superintendent:

Dr. Franklin B. Walter

CAI Coordinator(s):

Dr. Margaret Mauter
Dan Brown
Eugene Miltko

| | |
|---|---|
| Number of districts: | 666 |
| Number of public schools: | 3,864 |
| Number of Catholic schools: | 604 |
| Number of private schools: | 271 |

State Ranking (Of 50 States & Wash. D.C.)

| | |
|---|---|
| % districts using micros: | 21 |
| % public schools using micros: | 27 |
| Number of microcomputers:* | 8 |
| Micro-Intensity (of schools using microcomputers): | 40 |

Microcomputers Installed:*

| By school type | | % by brand | |
|---|---|---|---|
| Elementary: | 8,227 | Apple: | 45.7 |
| Junior High: | 4,622 | Commodore: | 14.8 |
| Senior High: | 10,056 | Radio Shack: | 18.3 |
| Total: | 23,495 | Other: | 21.2 |

*Forecast based on 81.7 % of schools using microcomputers in the state.

| | STATE FALL '84 | | STATE FALL '83 | | NATIONAL COMPARISON FALL '84 | |
|---|---|---|---|---|---|---|
| | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity |
| PUBLIC SCHOOLS | | | | | | |
| Districts | 98.8 | 80.2 | 91.1 | NA | 94.2 | NA |
| All Schools | 85.1 | 73.4 | 64.2 | 100.1 | 85.1 | 63.5 |
| Elementary | 83.1 | 97.1 | 58.5 | 131.7 | 82.2 | 79.3 |
| Junior High | 93.0 | 62.4 | 72.8 | 88.8 | 93.1 | 61.2 |
| Senior High | 96.8 | 62.4 | 83.7 | 86.8 | 94.6 | 51.5 |
| 0-4.9% poverty | 94.8 | 68.3 | 80.7 | 90.5 | 91.7 | 54.4 |
| 5-11.9% poverty | 93.2 | 76.2 | 68.4 | 104.2 | 91.9 | 62.0 |
| 12-24.9% poverty | 78.8 | 79.8 | 49.1 | 113.7 | 84.8 | 67.5 |
| Over 25% poverty | 75.0 | 76.9 | 47.2 | 129.9 | 74.4 | 73.3 |
| Urban | 79.5 | 77.9 | 61.2 | 107.6 | 81.7 | 72.4 |
| Suburban | 91.9 | 73.7 | 69.8 | 95.4 | 89.5 | 64.7 |
| Rural | 85.4 | 66.5 | 62.7 | 94.7 | 84.0 | 54.9 |
| PRIVATE SCHOOLS | | | | | | |
| Catholic schools | 62.6 | 89.1 | 43.9 | NA | 63.4 | 73.5 |
| Private schools | 48.7 | 37.2 | 29.6 | NA | 46.4 | 40.5 |

Oklahoma Dept. of Education
Oliver Hodge Mem. Ed. Bldg.
Oklahoma City, OK 73105
405/521-3331

Superintendent:

Dr. John Folks

CAI Coordinator(s):

Susan Wheeler

| | |
|---|---|
| Number of districts: | 633 |
| Number of public schools: | 1,786 |
| Number of Catholic schools: | 33 |
| Number of private schools: | 68 |

State Ranking (Of 50 States & Wash. D.C.)

| | |
|---|---|
| % districts using micros: | 46 |
| % public schools using micros: | 45 |
| Number of microcomputers:* | 24 |
| Micro-Intensity (of schools using microcomputers): | 23 |

Microcomputers Installed:*

| By school type | | % by brand | |
|---|---|---|---|
| Elementary: | 2,734 | Apple: | 35.2 |
| Junior High: | 1,244 | Commodore: | 13.2 |
| Senior High: | 4,379 | Radio Shack: | 36.0 |
| Total: | 8,966 | Other: | 15.6 |

*Forecast based on 87.1% of schools using microcomputers in the state.

| | STATE FALL '84 | | STATE FALL '83 | | NATIONAL COMPARISON FALL '84 | |
|---|---|---|---|---|---|---|
| | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity |
| PUBLIC SCHOOLS | | | | | | |
| Districts | 82.2 | 69.7 | 68.7 | NA | 94.2 | NA |
| All Schools | 74.7 | 57.0 | 55.8 | 70.9 | 85.1 | 63.5 |
| Elementary | 64.3 | 78.4 | 40.1 | 100.8 | 82.2 | 79.3 |
| Junior High | 87.6 | 80.3 | 70.3 | 97.0 | 93.1 | 61.2 |
| Senior High | 92.1 | 40.8 | 83.9 | 48.8 | 94.6 | 51.5 |
| 0-4.9% poverty | 87.4 | 108.8 | 68.5 | 42.4 | 91.7 | 54.4 |
| 5-11.9% poverty | 81.6 | 63.3 | 61.3 | 89.6 | 91.9 | 62.0 |
| 12-24.9% poverty | 68.9 | 52.0 | 54.5 | 71.9 | 84.8 | 67.5 |
| Over 25% poverty | 72.4 | 50.2 | 51.5 | 56.1 | 74.4 | 73.3 |
| Urban | 57.4 | 77.6 | 41.1 | 82.2 | 81.7 | 72.4 |
| Suburban | 82.5 | 70.4 | 62.7 | 87.2 | 89.5 | 64.7 |
| Rural | 76.2 | 45.4 | 56.3 | 59.0 | 84.0 | 54.9 |
| PRIVATE SCHOOLS | | | | | | |
| Catholic schools | 66.7 | 63.3 | 21.2 | NA | 63.4 | 73.5 |
| Private schools | 44.1 | 62.6 | 25.9 | NA | 46.4 | 40.5 |

Oregon Dept. of Education
700 Pringle Pkwy. SE
Salem, OR 97310
503/378-3569

Superintendent:

Dr. Verne A. Duncan

CAI Coordinator(s):

James Sanner

| | |
|---|---|
| Number of districts: | 305 |
| Number of public schools: | 1,236 |
| Number of Catholic schools: | 64 |
| Number of private schools: | 266 |

State Ranking (Of 50 States & Wash. D.C.)

| | |
|---|---|
| % districts using micros: | 35 |
| % public schools using micros: | 4 |
| Number of microcomputers:* | 25 |
| Micro-Intensity (of schools using microcomputers): | 19 |

Microcomputers Installed:*

| By school type | | % by brand | |
|---|---|---|---|
| Elementary: | 3,702 | Apple: | 45.7 |
| Junior High: | 1,863 | Commodore: | 29.2 |
| Senior High: | 2,931 | Radio Shack: | 13.2 |
| Total: | 8,724 | Other: | 11.9 |

*Forecast based on 93.2 % of schools using microcomputers in the state.

| | STATE FALL '84 | | STATE FALL '83 | | NATIONAL COMPARISON FALL '84 | |
|---|---|---|---|---|---|---|
| | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity |
| PUBLIC SCHOOLS | | | | | | |
| Districts | 95.4 | 48.0 | 94.6 | NA | 94.2 | NA |
| All Schools | 95.2 | 51.3 | 92.4 | 73.6 | 85.1 | 63.5 |
| Elementary | 95.1 | 60.8 | 91.4 | 83.0 | 82.2 | 79.3 |
| Junior High | 98.7 | 43.2 | 98.7 | 64.7 | 93.1 | 61.2 |
| Senior High | 99.1 | 46.5 | 97.7 | 68.0 | 94.6 | 51.5 |
| 0-4.9% poverty | 94.6 | 43.8 | 99.1 | 54.8 | 91.7 | 54.4 |
| 5-11.9% poverty | 97.5 | 52.1 | 92.6 | 77.9 | 91.9 | 62.0 |
| 12-24.9% poverty | 96.4 | 53.1 | 94.6 | 77.4 | 84.8 | 67.5 |
| Over 25% poverty | 91.7 | 29.3 | 90.9 | 52.1 | 74.4 | 73.3 |
| Urban | 93.4 | 54.7 | 91.8 | 76.0 | 81.7 | 72.4 |
| Suburban | 95.3 | 49.4 | 96.4 | 75.5 | 89.5 | 64.7 |
| Rural | 95.7 | 50.8 | 91.1 | 78.1 | 84.0 | 54.9 |
| PRIVATE SCHOOLS | | | | | | |
| Catholic schools | 78.1 | 45.8 | 40.6 | NA | 63.4 | 73.5 |
| Private schools | 47.7 | 33.7 | 21.9 | NA | 46.4 | 40.5 |

Pennsylvania Dept. of Education
353 Market St.
Harrisburg, PA 17101
717/783-6788

Superintendent:

Dr. Robert C. Wilbrun

CAI Coordinator(s):

Mr. V.W. Bolton

| | |
|---|---|
| Number of districts: | 514 |
| Number of public schools: | 3,347 |
| Number of Catholic schools: | 876 |
| Number of private schools: | 796 |

State Ranking (Of 50 States & Wash. D.C.)

| | |
|---|---|
| % districts using micros: | 18 |
| % public schools using micros: | 38 |
| Number of microcomputers:* | 7 |
| Micro-Intensity (of schools using microcomputers): | 28 |

Microcomputers Installed:*

| By school type | | % by brand | |
|---|---|---|---|
| Elementary: | 7,433 | Apple: | 43.9 |
| Junior High: | 4,722 | Commodore: | 12.8 |
| Senior High: | 11,651 | Radio Shack: | 32.3 |
| Total: | 24,226 | Other: | 11.0 |

*Forecast based on 81.1 % of schools using microcomputers in the state.

| | STATE FALL '84 | | STATE FALL '83 | | NATIONAL COMPARISON FALL '84 | |
|---|---|---|---|---|---|---|
| | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity |
| PUBLIC SCHOOLS | | | | | | |
| Districts | 99.0 | 65.1 | 96.1 | NA | 94.2 | NA |
| All Schools | 80.1 | 62.0 | 59.6 | 80.9 | 85.1 | 63.5 |
| Elementary | 75.3 | 83.6 | 48.7 | 112.0 | 82.2 | 79.3 |
| Junior High | 93.6 | 53.1 | 78.4 | 66.2 | 93.1 | 61.2 |
| Senior High | 91.7 | 50.6 | 85.9 | 68.4 | 94.6 | 51.5 |
| 0-4.9% poverty | 87.6 | 56.6 | 73.0 | 68.7 | 91.7 | 54.4 |
| 5-11.9% poverty | 86.7 | 58.9 | 61.2 | 85.9 | 91.9 | 62.0 |
| 12-24.9% poverty | 83.1 | 63.1 | 51.1 | 89.2 | 84.8 | 67.5 |
| Over 25% poverty | 48.2 | 100.0 | 57.4 | 85.7 | 74.4 | 73.3 |
| Urban | 68.5 | 69.8 | 53.8 | 97.2 | 81.7 | 72.4 |
| Suburban | 85.6 | 61.4 | 65.0 | 76.8 | 89.5 | 64.7 |
| Rural | 82.1 | 57.0 | 56.3 | 76.3 | 84.0 | 54.9 |
| PRIVATE SCHOOLS | | | | | | |
| Catholic schools | 62.9 | 84.8 | 21.1 | NA | 63.4 | 73.5 |
| Private schools | 41.8 | 37.1 | 19.2 | NA | 46.4 | 40.5 |

Rhode Island Dept. of Education
22 Hayes St.
Providence, RI 02908
401/277-2031

Superintendent:

Dr. J. Troy Earhart

CAI Coordinator(s):

Donald Gardner, Jr.

| | |
|---|---|
| Number of districts: | 40 |
| Number of public schools: | 289 |
| Number of Catholic schools: | 77 |
| Number of private schools: | 38 |

State Ranking (Of 50 States & Wash. D.C.)

| | |
|---|---|
| % districts using micros: | 3 |
| % public schools using micros: | 23 |
| Number of microcomputers:* | 44 |
| Micro-Intensity (of schools using microcomputers): | 6 |

Microcomputers Installed:*

| By school type | | % by brand | |
|---|---|---|---|
| Elementary: | 1,147 | Apple: | 49.3 |
| Junior High: | 472 | Commodore: | 9.0 |
| Senior High: | 1,234 | Radio Shack: | 34.4 |
| Total: | 2,856 | Other: | 7.3 |

*Forecast based on 68.4 % of schools using microcomputers in the state.

| | STATE FALL '84 | | STATE FALL '83 | | NATIONAL COMPARISON FALL '84 | |
|---|---|---|---|---|---|---|
| | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity |
| PUBLIC SCHOOLS | | | | | | |
| Districts | 100.0 | 45.8 | 90.0 | NA | 94.2 | NA |
| All Schools | 86.5 | 44.2 | 67.0 | 108.5 | 85.1 | 63.5 |
| Elementary | 84.4 | 53.5 | 61.9 | 150.4 | 82.2 | 79.3 |
| Junior High | 100.0 | 42.2 | 82.8 | 161.6 | 93.1 | 61.2 |
| Senior High | 90.9 | 37.3 | 82.6 | 69.8 | 94.6 | 51.5 |
| 0-4.9% poverty | 100.0 | 38.6 | 97.2 | 132.6 | 91.7 | 54.4 |
| 5-11.9% poverty | 87.9 | 45.4 | 68.6 | 97.8 | 91.9 | 62.0 |
| 12-24.9% poverty | 98.3 | 46.1 | 54.8 | 138.5 | 84.8 | 67.5 |
| Over 25% poverty | 60.0 | 39.7 | 0.0 | 0.0 | 74.4 | 73.3 |
| Urban | 81.3 | 40.4 | 71.0 | 110.3 | 81.7 | 72.4 |
| Suburban | 92.6 | 48.2 | 68.8 | 98.5 | 89.5 | 64.7 |
| Rural | 92.5 | 50.0 | 47.5 | 126.8 | 84.0 | 54.9 |
| PRIVATE SCHOOLS | | | | | | |
| Catholic schools | 61.0 | 88.1 | 17.1 | NA | 63.4 | 73.5 |
| Private schools | 68.4 | 30.0 | 38.5 | NA | 46.4 | 40.5 |

## SOUTH CAROLINA

South Carolina Dept. of Education
1429 Senate St.
Columbia, SC 29201
803/758-3403

Superintendent:

Dr. Charlie G. Williams

CAI Coordinator(s):

Paul F. Smith
Clyde H. Green

| | |
|---|---|
| Number of districts: | 113 |
| Number of public schools: | 1,153 |
| Number of Catholic schools: | 33 |
| Number of private schools: | 396 |

State Ranking (Of 50 States & Wash. D.C.)

| | |
|---|---|
| % districts using micros: | 29 |
| % public schools using micros: | 42 |
| Number of microcomputers:* | 35 |
| Micro-Intensity (of schools using microcomputers): | 49 |

Microcomputers Installed:*

| By school type | | % by brand | |
|---|---|---|---|
| Elementary: | 1,903 | Apple: | 59.1 |
| Junior High: | 696 | Commodore: | 5.7 |
| Senior High: | 2,570 | Radio Shack: | 21.6 |
| Total: | 5,221 | Other: | 13.6 |

*Forecast based on 78.7 % of schools using microcomputers in the state.

| | STATE FALL '84 | | STATE FALL '83 | | NATIONAL COMPARISON FALL '84 | |
|---|---|---|---|---|---|---|
| | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity |
| PUBLIC SCHOOLS | | | | | | |
| Districts | 96.4 | 106.2 | 77.9 | NA | 94.2 | NA |
| All Schools | 77.5 | 105.6 | 57.3 | 162.8 | 85.1 | 63.5 |
| Elementary | 73.1 | 128.6 | 51.4 | 189.4 | 82.2 | 79.3 |
| Junior High | 89.3 | 148.8 | 69.9 | 223.7 | 93.1 | 61.2 |
| Senior High | 88.3 | 77.6 | 70.4 | 139.5 | 94.6 | 51.5 |
| 0-4.9% poverty | 91.4 | 0.0 | 0.0 | 0.0 | 91.7 | 54.4 |
| 5-11.9% poverty | 92.4 | 106.9 | 75.0 | 304.2 | 91.9 | 62.0 |
| 12-24.9% poverty | 80.0 | 112.7 | 63.8 | 161.3 | 84.8 | 67.5 |
| Over 25% poverty | 68.1 | 100.1 | 52.9 | 164.3 | 74.4 | 73.3 |
| Urban | 84.9 | 127.2 | 71.8 | 212.2 | 81.7 | 72.4 |
| Suburban | 81.5 | 96.6 | 64.3 | 159.6 | 89.5 | 64.7 |
| Rural | 72.7 | 101.6 | 48.4 | 141.5 | 84.0 | 54.9 |
| PRIVATE SCHOOLS | | | | | | |
| Catholic schools | 54.6 | 60.4 | 0.0 | NA | 63.4 | 73.5 |
| Private schools | 22.2 | 42.6 | 8.3 | NA | 46.4 | 40.5 |

South Dakota Dept. of Education
700 N. Illinois St.
Pierre, SD 57501
605/773-3243

Superintendent:

Dr. James O. Hansen

CAI Coordinator(s):

Karon Schaak

| | |
|---|---|
| Number of districts: | 186 |
| Number of public schools: | 609 |
| Number of Catholic schools: | 31 |
| Number of private schools: | 87 |

State Ranking (Of 50 States & Wash. D.C.)

| | |
|---|---|
| % districts using micros: | 30 |
| % public schools using micros: | 47 |
| Number of microcomputers:* | 40 |
| Micro-Intensity (of schools using microcomputers): | 2 |

Microcomputers Installed:*

| By school type | | % by brand | |
|---|---|---|---|
| Elementary: | 1,191 | Apple: | 23.0 |
| Junior High: | 307 | Commodore: | 61.8 |
| Senior High: | 1,215 | Radio Shack: | 5.0 |
| Total: | 3,447 | Other: | 10.2 |

*Forecast based on 87.8 % of schools using microcomputers in the state.

| | STATE FALL '84 | | STATE FALL '83 | | NATIONAL COMPARISON FALL '84 | |
|---|---|---|---|---|---|---|
| | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity |
| PUBLIC SCHOOLS | | | | | | |
| Districts | 96.2 | 36.3 | 94.7 | NA | 94.2 | NA |
| All Schools | 73.9 | 33.2 | 65.0 | 42.9 | 85.1 | 63.5 |
| Elementary | 61.5 | 42.8 | 50.6 | 52.7 | 82.2 | 79.3 |
| Junior High | 100.0 | 49.5 | 93.8 | 87.9 | 93.1 | 61.2 |
| Senior High | 95.9 | 23.3 | 94.9 | 33.0 | 94.6 | 51.5 |
| 0-4.9% poverty | 100.0 | 35.6 | 100.0 | 44.9 | 91.7 | 54.4 |
| 5-11.9% poverty | 95.8 | 45.2 | 87.5 | 47.3 | 91.9 | 62.0 |
| 12-24.9% poverty | 75.0 | 29.8 | 62.9 | 46.1 | 84.8 | 67.5 |
| Over 25% poverty | 61.1 | 24.0 | 55.7 | 31.2 | 74.4 | 73.3 |
| Urban | 84.4 | 76.7 | 72.2 | 116.3 | 81.7 | 72.4 |
| Suburban | 100.0 | 43.8 | 92.9 | 45.2 | 89.5 | 64.7 |
| Rural | 72.2 | 30.2 | 63.4 | 38.1 | 84.0 | 54.9 |
| PRIVATE SCHOOLS | | | | | | |
| Catholic schools | 77.4 | 39.2 | 29.0 | NA | 63.4 | 73.5 |
| Private schools | 32.2 | 21.3 | 19.3 | NA | 46.4 | 40.5 |

Tennessee Dept. of Education
436 5th Ave.
Nashville, TN 37219
615/741-2731

Superintendent:

Dr. Robert McElrath

CAI Coordinator(s):

Betty Latture

| | |
|---|---|
| Number of districts: | 146 |
| Number of public schools: | 1,659 |
| Number of Catholic schools: | 54 |
| Number of private schools: | 257 |

State Ranking (Of 50 States & Wash. D.C.)

| | |
|---|---|
| % districts using micros: | 12 |
| % public schools using micros: | 32 |
| Number of microcomputers:* | 23 |
| Micro-Intensity (of schools using microcomputers): | 43 |

Microcomputers Installed:*

| By school type | | % by brand | |
|---|---|---|---|
| Elementary: | 3,991 | Apple: | 52.4 |
| Junior High: | 1,550 | Commodore: | 4.0 |
| Senior High: | 3,155 | Radio Shack: | 16.8 |
| Total: | 8,970 | Other: | 26.8 |

*Forecast based on 86.2 % of schools using microcomputers in the state.

| | STATE FALL '84 | | STATE FALL '83 | | NATIONAL COMPARISON FALL '84 | |
|---|---|---|---|---|---|---|
| | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity |
| PUBLIC SCHOOLS | | | | | | |
| Districts | 99.3 | 64.6 | 91.7 | NA | 94.2 | NA |
| All Schools | 83.2 | 82.5 | 61.2 | 123.9 | 85.1 | 63.5 |
| Elementary | 82.1 | 97.6 | 55.5 | 163.0 | 82.2 | 79.3 |
| Junior High | 88.3 | 68.1 | 78.9 | 134.3 | 93.1 | 61.2 |
| Senior High | 90.0 | 73.5 | 77.1 | 94.0 | 94.6 | 51.5 |
| 0-4.9% poverty | 95.5 | 0.0 | 0.0 | 172.3 | 91.7 | 54.4 |
| 5-11.9% poverty | 87.9 | 74.3 | 96.2 | 74.0 | 91.9 | 62.0 |
| 12-24.9% poverty | 80.2 | 84.0 | 62.9 | 124.3 | 84.8 | 67.5 |
| Over 25% poverty | 88.4 | 96.3 | 58.2 | 134.4 | 74.4 | 73.3 |
| Urban | 77.9 | 79.0 | 72.8 | 109.4 | 81.7 | 72.4 |
| Suburban | 81.4 | 90.9 | 66.5 | 126.1 | 89.5 | 64.7 |
| Rural | 85.4 | 83.0 | 55.1 | 135.5 | 84.0 | 54.9 |
| PRIVATE SCHOOLS | | | | | | |
| Catholic schools | 81.5 | 63.7 | 38.9 | NA | 63.4 | 73.5 |
| Private schools | 55.6 | 42.6 | 30.9 | NA | 46.4 | 40.5 |

Texas Dept. of Education
201 East 11th Street
Austin, TX 78701
512/834-4000

Superintendent:

Raymon L. Bynum

CAI Coordinator(s):

Joe Price, Jr.
Jill Gray

| | |
|---|---|
| Number of districts: | 1,085 |
| Number of public schools: | 5,383 |
| Number of Catholic schools: | 295 |
| Number of private schools: | 593 |

State Ranking (Of 50 States & Wash. D.C.)

| | |
|---|---|
| % districts using micros: | 42 |
| % public schools using micros: | 44 |
| Number of microcomputers:* | 3 |
| Micro-Intensity (of schools using microcomputers): | 33 |

Microcomputers Installed:*

| By school type | | % by brand | |
|---|---|---|---|
| Elementary: | 14,204 | Apple: | 43.8 |
| Junior High: | 8,880 | Commodore: | 18.0 |
| Senior High: | 11,530 | Radio Shack: | 23.7 |
| Total: | 36,134 | Other: | 14.5 |

*Forecast based on 82.4 % of schools using microcomputers in the state.

| | STATE FALL '84 | | STATE FALL '83 | | NATIONAL COMPARISON FALL '84 | |
|---|---|---|---|---|---|---|
| | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity |
| PUBLIC SCHOOLS | | | | | | |
| Districts | 89.1 | 88.1 | 73.7 | NA | 94.2 | NA |
| All Schools | 74.9 | 64.0 | 57.6 | 87.8 | 85.1 | 63.5 |
| Elementary | 68.8 | 75.3 | 51.0 | 89.6 | 82.2 | 79.3 |
| Junior High | 83.7 | 58.3 | 63.3 | 95.2 | 93.1 | 61.2 |
| Senior High | 89.9 | 58.7 | 78.5 | 86.4 | 94.6 | 51.5 |
| 0-4.9% poverty | 74.4 | 73.2 | 84.6 | 74.5 | 91.7 | 54.4 |
| 5-11.9% poverty | 80.9 | 68.2 | 66.9 | 99.2 | 91.9 | 62.0 |
| 12-24.9% poverty | 77.1 | 60.7 | 56.1 | 95.0 | 84.8 | 67.5 |
| Over 25% poverty | 66.4 | 58.7 | 51.4 | 77.6 | 74.4 | 73.3 |
| Urban | 72.3 | 74.8 | 57.6 | 101.7 | 81.7 | 72.4 |
| Suburban | 79.8 | 65.2 | 63.2 | 90.7 | 89.5 | 64.7 |
| Rural | 75.0 | 46.5 | 53.0 | 61.5 | 84.0 | 54.9 |
| PRIVATE SCHOOLS | | | | | | |
| Catholic schools | 52.2 | 56.1 | 18.9 | NA | 63.4 | 73.5 |
| Private schools | 47.1 | 37.6 | 20.2 | NA | 46.4 | 40.5 |

Utah Dept. of Education
250 East 500 South
Salt Lake City, UT 84111
801/533-5431

Superintendent:

Dr. G. Leland Burmingham

CAI Coordinator(s):

Mr. R. Elwood Pace
George I. Brown

| | |
|---|---|
| Number of districts: | 46 |
| Number of public schools: | 670 |
| Number of Catholic schools: | 12 |
| Number of private schools: | 21 |

State Ranking (Of 50 States & Wash. D.C.)

| | |
|---|---|
| % districts using micros: | 4 |
| % public schools using micros: | 3 |
| Number of microcomputers:* | 29 |
| Micro-Intensity (of schools using microcomputers): | 24 |

Microcomputers Installed:*

| By school type | | % by brand | |
|---|---|---|---|
| Elementary: | 2,440 | Apple: | 50.7 |
| Junior High: | 1,282 | Commodore: | 17.1 |
| Senior High: | 2,761 | Radio Shack: | 4.2 |
| Total: | 6,629 | Other: | 28.0 |

*Forecast based on 96.7 % of schools using microcomputers in the state.

| | STATE FALL '84 | | STATE FALL '83 | | NATIONAL COMPARISON FALL '84 | |
|---|---|---|---|---|---|---|
| | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity |
| PUBLIC SCHOOLS | | | | | | |
| Districts | 100.0 | 100.2 | 100.0 | NA | 94.2 | NA |
| All Schools | 96.1 | 57.9 | 85.7 | 83.9 | 85.1 | 63.5 |
| Elementary | 96.7 | 89.2 | 86.0 | 130.9 | 82.2 | 79.3 |
| Junior High | 100.0 | 56.5 | 92.4 | 103.1 | 93.1 | 61.2 |
| Senior High | 94.0 | 31.6 | 88.9 | 41.0 | 94.6 | 51.5 |
| 0-4.9% poverty | 100.0 | 36.2 | 92.0 | 42.5 | 91.7 | 54.4 |
| 5-11.9% poverty | 97.9 | 57.9 | 87.6 | 98.0 | 91.9 | 62.0 |
| 12-24.9% poverty | 96.1 | 60.4 | 86.0 | 75.1 | 84.8 | 67.5 |
| Over 25% poverty | 53.3 | 17.0 | 40.0 | 41.2 | 74.4 | 73.3 |
| Urban | 95.2 | 70.0 | 91.5 | 91.6 | 81.7 | 72.4 |
| Suburban | 97.9 | 78.0 | 94.7 | 111.9 | 89.5 | 64.7 |
| Rural | 95.0 | 34.0 | 73.5 | 43.3 | 84.0 | 54.9 |
| PRIVATE SCHOOLS | | | | | | |
| Catholic schools | 33.3 | 46.1 | 16.7 | NA | 63.4 | 73.5 |
| Private schools | 76.2 | 34.7 | 28.6 | NA | 46.4 | 40.5 |

Vermont Dept. of Education
State Office Bldg.
Montpelier, VT 05602
802/828-3135

Superintendent:

Dr. Stephen S. Kaagan

CAI Coordinator(s):

Robert W. Kenney
Jean S. Garvin

| | |
|---|---|
| Number of districts: | 290 |
| Number of public schools: | 382 |
| Number of Catholic schools: | 15 |
| Number of private schools: | 57 |

State Ranking (Of 50 States & Wash. D.C.)

| | |
|---|---|
| % districts using micros: | 48 |
| % public schools using micros: | 26 |
| Number of microcomputers:* | 48 |
| Micro-Intensity (of schools using microcomputers): | 15 |

Microcomputers Installed:*

| By school type | | % by brand | |
|---|---|---|---|
| Elementary: | 918 | Apple: | 24.0 |
| Junior High: | 126 | Commodore: | 26.5 |
| Senior High: | 586 | Radio Shack: | 35.7 |
| Total: | 1,752 | Other: | 13.8 |

*Forecast based on 81.0 % of schools using microcomputers in the state.

| | STATE FALL '84 | | STATE FALL '83 | | NATIONAL COMPARISON FALL '84 | |
|---|---|---|---|---|---|---|
| | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity |
| PUBLIC SCHOOLS | | | | | | |
| Districts | 77.2 | 48.8 | 61.4 | NA | 94.2 | NA |
| All Schools | 85.6 | 49.3 | 65.1 | 71.6 | 85.1 | 63.5 |
| Elementary | 82.9 | 51.2 | 57.2 | 76.1 | 82.2 | 79.3 |
| Junior High | 93.3 | 41.0 | 93.3 | 51.5 | 93.1 | 61.2 |
| Senior High | 98.0 | 51.0 | 98.1 | 74.9 | 94.6 | 51.5 |
| 0-4.9% poverty | 91.4 | 48.9 | 74.1 | 51.5 | 91.7 | 54.4 |
| 5-11.9% poverty | 84.9 | 50.5 | 61.1 | 78.7 | 91.9 | 62.0 |
| 12-24.9% poverty | 85.2 | 46.7 | 66.4 | 76.5 | 84.8 | 67.5 |
| Over 25% poverty | 93.1 | 48.1 | 82.4 | 59.3 | 74.4 | 73.3 |
| Urban | 100.0 | 53.5 | 100.0 | 71.4 | 81.7 | 72.4 |
| Suburban | 90.0 | 45.0 | 70.0 | 103.8 | 89.5 | 64.7 |
| Rural | 86.1 | 49.8 | 65.1 | 70.0 | 84.0 | 54.9 |
| PRIVATE SCHOOLS | | | | | | |
| Catholic schools | 93.3 | 62.8 | 80.0 | NA | 63.4 | 73.5 |
| Private schools | 50.9 | 16.0 | 30.9 | NA | 46.4 | 40.5 |

# VIRGINIA

Virginia Dept. of Education
101 North 14th St.
Richmond, VA 23219
804/225-2020

Superintendent:

Dr. S. John Davis

CAI Coordinator(s):

Leslie W. Jones
William Bezley
Mark Delp
Dr. V. Wendell Hylton

| | |
|---|---|
| Number of districts: | 153 |
| Number of public schools: | 1,786 |
| Number of Catholic schools: | 71 |
| Number of private schools: | 409 |

State Ranking (Of 50 States & Wash. D.C.)

| | |
|---|---|
| % districts using micros: | 24 |
| % public schools using micros: | 19 |
| Number of microcomputers:* | 16 |
| Micro-Intensity (of schools using microcomputers): | 41 |

Microcomputers Installed:*

| By school type | | % by brand | |
|---|---|---|---|
| Elementary: | 4,087 | Apple: | 38.5 |
| Junior High: | 2,419 | Commodore: | 12.7 |
| Senior High: | 5,105 | Radio Shack: | 25.9 |
| Total: | 11,769 | Other: | 22.9 |

*Forecast based on 89.1 % of schools using microcomputers in the state.

| | STATE FALL '84 | | STATE FALL '83 | | NATIONAL COMPARISON FALL '84 | |
|---|---|---|---|---|---|---|
| | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity |
| PUBLIC SCHOOLS | | | | | | |
| Districts | 97.4 | 91.0 | 89.5 | NA | 94.2 | NA |
| All Schools | 87.6 | 80.0 | 71.6 | 127.3 | 85.1 | 63.5 |
| Elementary | 85.8 | 104.8 | 67.5 | 168.5 | 82.2 | 79.3 |
| Junior High | 93.5 | 71.3 | 79.7 | 105.5 | 93.1 | 61.2 |
| Senior High | 95.9 | 65.3 | 88.1 | 112.6 | 94.6 | 51.5 |
| 0-4.9% poverty | 96.3 | 82.9 | 96.3 | 283.2 | 91.7 | 54.4 |
| 5-11.9% poverty | 89.0 | 73.8 | 79.0 | 101.4 | 91.9 | 62.0 |
| 12-24.9% poverty | 84.9 | 76.5 | 68.8 | 124.8 | 84.8 | 67.5 |
| Over 25% poverty | 87.2 | 104.4 | 65.3 | 105.6 | 74.4 | 73.3 |
| Urban | 80.8 | 90.5 | 67.5 | 140.0 | 81.7 | 72.4 |
| Suburban | 90.9 | 73.1 | 79.7 | 144.1 | 89.5 | 64.7 |
| Rural | 87.8 | 77.4 | 67.0 | 101.8 | 84.0 | 54.9 |
| PRIVATE SCHOOLS | | | | | | |
| Catholic schools | 83.1 | 72.8 | 30.0 | NA | 63.4 | 73.5 |
| Private schools | 41.6 | 41.7 | 25.4 | NA | 46.4 | 40.5 |

Washington Dept. of Education
Old Capitol Bldg.
Olympia, WA 98504
206/753-6712

Superintendent:

Dr. Frank B. Brouillet

CAI Coordinator(s):

None

| | |
|---|---|
| Number of districts: | 299 |
| Number of public schools: | 1,627 |
| Number of Catholic schools: | 95 |
| Number of private schools: | 342 |

State Ranking (Of 50 States & Wash. D.C.)

| | |
|---|---|
| % districts using micros: | 26 |
| % public schools using micros: | 13 |
| Number of microcomputers:* | 12 |
| Micro-Intensity (of schools using microcomputers): | 13 |

Microcomputers Installed:*

| By school type | | % by brand | |
|---|---|---|---|
| Elementary: | 5,753 | Apple: | 52.3 |
| Junior High: | 2,729 | Commodore: | 19.4 |
| Senior High: | 5,237 | Radio Shack: | 14.1 |
| Total: | 14,246 | Other: | 14.2 |

*Forecast based on 86.5 % of schools using microcomputers in the state.

| | STATE FALL '84 | | STATE FALL '83 | | NATIONAL COMPARISON FALL '84 | |
|---|---|---|---|---|---|---|
| | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity |
| PUBLIC SCHOOLS | | | | | | |
| Districts | 97.0 | 48.4 | 89.4 | NA | 94.2 | NA |
| All Schools | 90.2 | 48.4 | 77.4 | 70.8 | 85.1 | 63.5 |
| Elementary | 88.4 | 57.1 | 72.7 | 89.1 | 82.2 | 79.3 |
| Junior High | 94.2 | 51.5 | 81.5 | 70.7 | 93.1 | 61.2 |
| Senior High | 95.9 | 40.0 | 92.0 | 57.2 | 94.6 | 51.5 |
| 0-4.9% poverty | 91.3 | 44.2 | 89.0 | 44.6 | 91.7 | 54.4 |
| 5-11.9% poverty | 92.7 | 48.8 | 77.0 | 81.9 | 91.9 | 62.0 |
| 12-24.9% poverty | 88.6 | 50.2 | 74.1 | 69.3 | 84.8 | 67.5 |
| Over 25% poverty | 83.3 | 30.2 | 73.7 | 39.4 | 74.4 | 73.3 |
| Urban | 88.5 | 58.7 | 84.3 | 84.5 | 81.7 | 72.4 |
| Suburban | 91.0 | 47.9 | 76.4 | 71.0 | 89.5 | 64.7 |
| Rural | 92.5 | 35.6 | 74.6 | 52.9 | 84.0 | 54.9 |
| PRIVATE SCHOOLS | | | | | | |
| Catholic schools | 80.0 | 51.4 | 17.7 | NA | 63.4 | 73.5 |
| Private schools | 52.3 | 28.7 | 24.2 | NA | 46.4 | 40.5 |

West Virginia Dept. of Education
Bldg. 6 Capitol Complex
Charleston, WV 25305
304/348-2681

Superintendent:

Dr. Roy Truby

CAI Coordinator(s):

Dr. John E. McClure

| | |
|---|---|
| Number of districts: | 55 |
| Number of public schools: | 1,122 |
| Number of Catholic schools: | 45 |
| Number of private schools: | 79 |

State Ranking (Of 50 States & Wash. D.C.)

| | |
|---|---|
| % districts using micros: | 5 |
| % public schools using micros: | 29 |
| Number of microcomputers:* | 33 |
| Micro-Intensity (of schools using microcomputers): | 29 |

Microcomputers Installed:*

| By school type | | % by brand | |
|---|---|---|---|
| Elementary: | 1,675 | Apple: | 34.6 |
| Junior High: | 998 | Commodore: | 7.4 |
| Senior High: | 2,896 | Radio Shack: | 12.9 |
| Total: | 5,640 | Other: | 45.1 |

*Forecast based on 94.0 % of schools using microcomputers in the state.

| | STATE FALL '84 | | STATE FALL '83 | | NATIONAL COMPARISON FALL '84 | |
|---|---|---|---|---|---|---|
| | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity |
| PUBLIC SCHOOLS | | | | | | |
| Districts | 100.0 | 78.1 | 100.0 | NA | 94.2 | NA |
| All Schools | 84.9 | 62.4 | 61.5 | 91.4 | 85.1 | 63.5 |
| Elementary | 82.1 | 105.8 | 53.2 | 133.3 | 82.2 | 79.3 |
| Junior High | 91.7 | 55.7 | 80.0 | 74.0 | 93.1 | 61.2 |
| Senior High | 99.0 | 48.8 | 89.6 | 78.7 | 94.6 | 51.5 |
| 0-4.9% poverty | 0.0 | 0.0 | 0.0 | 0.0 | 91.7 | 54.4 |
| 5-11.9% poverty | 100.0 | 69.3 | 43.9 | 125.8 | 91.9 | 62.0 |
| 12-24.9% poverty | 83.2 | 65.5 | 66.3 | 92.3 | 84.8 | 67.5 |
| Over 25% poverty | 86.8 | 48.3 | 59.9 | 86.7 | 74.4 | 73.3 |
| Urban | 97.3 | 61.4 | 87.0 | 89.3 | 81.7 | 72.4 |
| Suburban | 86.8 | 51.4 | 65.0 | 72.2 | 89.5 | 64.7 |
| Rural | 82.6 | 66.8 | 57.4 | 100.9 | 84.0 | 54.9 |
| PRIVATE SCHOOLS | | | | | | |
| Catholic schools | 88.9 | 55.1 | 64.4 | NA | 63.4 | 73.5 |
| Private schools | 22.8 | 33.6 | 12.2 | NA | 46.4 | 40.5 |

Wisconsin Dept. of Education
125 S. Webster St.
Madison, WI 53702
608/266-1771

Superintendent:

Dr. Herbert J. Grover

CAI Coordinator(s):

Donald L. Chambers
Elaine Anderson

| | |
|---|---|
| Number of districts: | 445 |
| Number of public schools: | 1,934 |
| Number of Catholic schools: | 453 |
| Number of private schools: | 493 |

State Ranking (Of 50 States & Wash. D.C.)

| | |
|---|---|
| % districts using micros: | 13 |
| % public schools using micros: | 7 |
| Number of microcomputers:* | 13 |
| Micro-Intensity (of schools using microcomputers): | 21 |

Microcomputers Installed:*

| By school type | | % by brand | |
|---|---|---|---|
| Elementary: | 5,019 | Apple: | 70.8 |
| Junior High: | 2,197 | Commodore: | 13.8 |
| Senior High: | 6,160 | Radio Shack: | 7.5 |
| Total: | 14,152 | Other: | 7.9 |

*Forecast based on 86.3 % of schools using microcomputers in the state.

| | STATE FALL '84 | | STATE FALL '83 | | NATIONAL COMPARISON FALL '84 | |
|---|---|---|---|---|---|---|
| | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity |
| PUBLIC SCHOOLS | | | | | | |
| Districts | 99.3 | 56.5 | 96.6 | NA | 94.2 | NA |
| All Schools | 93.0 | 54.1 | 76.7 | 75.6 | 85.1 | 63.5 |
| Elementary | 92.0 | 72.0 | 69.6 | 99.6 | 82.2 | 79.3 |
| Junior High | 97.1 | 52.3 | 85.9 | 82.4 | 93.1 | 61.2 |
| Senior High | 98.6 | 41.1 | 95.9 | 57.7 | 94.6 | 51.5 |
| 0-4.9% poverty | 91.0 | 51.1 | 81.4 | 76.4 | 91.7 | 54.4 |
| 5-11.9% poverty | 93.8 | 53.2 | 78.6 | 74.8 | 91.9 | 62.0 |
| 12-24.9% poverty | 94.7 | 59.2 | 71.6 | 80.2 | 84.8 | 67.5 |
| Over 25% poverty | 87.5 | 34.1 | 69.4 | 45.0 | 74.4 | 73.3 |
| Urban | 91.8 | 65.1 | 66.3 | 99.1 | 81.7 | 72.4 |
| Suburban | 93.6 | 52.6 | 83.6 | 75.1 | 89.5 | 64.7 |
| Rural | 94.0 | 46.6 | 79.9 | 64.4 | 84.0 | 54.9 |
| PRIVATE SCHOOLS | | | | | | |
| Catholic schools | 58.3 | 70.3 | 16.3 | NA | 63.4 | 73.5 |
| Private schools | 52.7 | 47.6 | 25.0 | NA | 46.4 | 40.5 |

Wyoming Dept. of Education
Hathaway Bldg.
Cheyenee, WY 82002
307/777-7673

Superintendent:

Mrs. Lynn O. Simons

CAI Coordinator(s):

Bill Futrell

| | |
|---|---|
| Number of districts: | 49 |
| Number of public schools: | 381 |
| Number of Catholic schools: | 8 |
| Number of private schools: | 30 |

State Ranking (Of 50 States & Wash. D.C.)

| | |
|---|---|
| % districts using micros: | 6 |
| % public schools using micros: | 24 |
| Number of microcomputers:* | 43 |
| Micro-Intensity (of schools using microcomputers): | 4 |

Microcomputers Installed:*

| By school type | | % by brand | |
|---|---|---|---|
| Elementary: | 1,173 | Apple: | 78.0 |
| Junior High: | 536 | Commodore: | 4.0 |
| Senior High: | 1,033 | Radio Shack: | 12.6 |
| Total: | 2,896 | Other: | 5.4 |

*Forecast based on 83.3 % of schools using microcomputers in the state.

| | STATE FALL '84 | | STATE FALL '83 | | NATIONAL COMPARISON FALL '84 | |
|---|---|---|---|---|---|---|
| | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity | % Using Micros | Micro-Intensity |
| PUBLIC SCHOOLS | | | | | | |
| Districts | 100.0 | 33.6 | 98.0 | NA | 94.2 | NA |
| All Schools | 86.3 | 37.1 | 80.1 | 58.1 | 85.1 | 63.5 |
| Elementary | 87.7 | 48.3 | 79.3 | 74.9 | 82.2 | 79.3 |
| Junior High | 100.0 | 40.9 | 94.7 | 59.8 | 93.1 | 61.2 |
| Senior High | 100.0 | 23.9 | 98.2 | 36.4 | 94.6 | 51.5 |
| 0-4.9% poverty | 83.3 | 26.8 | 90.9 | 44.6 | 91.7 | 54.4 |
| 5-11.9% poverty | 93.9 | 46.8 | 83.7 | 61.9 | 91.9 | 62.0 |
| 12-24.9% poverty | 92.9 | 23.6 | 84.6 | 57.5 | 84.8 | 67.5 |
| Over 25% poverty | 100.0 | 155.0 | 0.0 | 150.5 | 74.4 | 73.3 |
| Urban | 85.7 | 168.9 | 86.2 | 249.1 | 81.7 | 72.4 |
| Suburban | 100.0 | 81.8 | 100.0 | 189.0 | 89.5 | 64.7 |
| Rural | 84.6 | 31.9 | 80.1 | 50.7 | 84.0 | 54.9 |
| PRIVATE SCHOOLS | | | | | | |
| Catholic schools | 87.5 | 54.4 | 37.5 | NA | 63.4 | 73.5 |
| Private schools | 30.0 | 15.1 | 18.2 | NA | 46.4 | 40.5 |

APPENDIX C

## SURVEY METHODOLOGY AND DEFINITIONS

### Survey Timing and Techniques

Several surveys were used to compile the data shown in this report. The number of public schools and districts using computers over the four-year period 1981-1984 were compiled during our annual summer telephone surveys of all public school districts. The data reported on the quantity of computers and the brands used were compiled during the summer 1983 and summer 1984 surveys. This data has been supplemented by mail surveys to all public schools. Private and Catholic school surveys are taken annually in the middle of the school year, from approximately January to March. Consequently, comparisons with the findings on public school microcomputer usage are effected by timing.

Market Data Retrieval has conducted a telephone survey of public school districts each summer for many years. This survey gathers data on school and district enrollments and grade ranges, school openings and closings, and address and phone number changes, etc. The survey is conducted from July 1st to September 15th every year. Every district is contacted. District personnel are interviewed by phone, and the information is entered into our computer after a series of editing and checking steps.

The mail survey is generally conducted throughout the fall. Due to follow-up campaigns to non-respondent schools, survey responses continue to be received into January and February. In order to get the most comprehensive information on the number of computers used in a building, and the brands in use, the mail survey was also used. This was done even though many districts were able to report this data during the telephone survey.

## Use of Projected Data

All districts have been able to respond as to whether or not each of their schools used a microcomputer each year. Consequently, the number of schools shown as microcomputer users do not represent a projection based on a sample but a total of the schools reported by their districts. Not all districts, however, are able to provide the quantity of microcomputers used in each school and their brand(s). The district-supplied data has been supplemented by the early responses from the mail survey each year to maximize the number of schools where complete data on quantity and brand of computers is available (over 70% in 1983; 85% in 1984). In the chapters of this report where the quantity of installed computers is discussed (including Micro-Intensity), the data is reported for the portion of schools with complete data only. It is not projected for the total of microcomputer-using schools. For comparison, the distribution of all schools using computers is also shown so readers can make their own judgments or extrapolations. Market share data by brand, and our projections of microcomputers installed, are projections based on the 70% and 85% of schools reporting full data.

## Private School Data

Microcomputer data on Catholic and private schools was compiled mid-winter in the each school year and has been supplemented by early responses from the fall school building mail surveys. Consequently, timing variances must be taken into account by the reader.

## Cross Tabulations

To prepare the report, we employed various computer programs which tabulated the microcomputer data against other data available on the schools. The data was then summarized for presentation in the text.

The other data elements are listed below, with explanations where appropriate:

### State

### School type (grade range)

Elementary, Junior High, Senior High, K-12 (a combined school spanning both elementary and secondary grades) and special education schools (typically ungraded special education schools).

### School Enrollment

Poverty Level

A U.S. census derived measure of the percent of families below the federal poverty line in the school district. This is based on 1970 census data for Fall 1983 data. Recently, 1980 census data allocated to school districts by the Department of Education was made available. Consequently, that data was used for our Fall, 1984 tabulations. Readers must make their own assumptions as to the validity of comparisons between Fall 1983 to Fall 1984 where poverty measures are shown. However, the data is certainly meaningful on a stand-alone basis for each period. The poverty level is used by the Department of Education in the allocation of some federal funding to schools.

Metro Status or Urban, Rural, Suburban

The status is determined based on our own formula relating schools and districts to Standard Metropolitan Statistical Areas (SMSA's) and population.

Micro-Intensity

The school or district enrollment divided by the number of microcomputers in the school or district. As used in this report, it pertains to those schools reporting the number of microcomputers used. Enrollment data is available on all schools. Micro-Intensity measures the potential for student access to the microcomputers.

When using Micro-Intensity, it should be remembered that the measure applies within a building or district using microcomputers. For state to state comparisons, the proportion of schools or districts using microcomputers should also be considered.

## Microcomputer Definition

In this text, "school with a micro" or "school using a micro" means that the school has at least one microcomputer available for student instruction. A "district with a micro" is a district containing at least one school with a micro. Microcomputers are used as commonly understood, i.e. personal or self-contained computers, rather than mini-computers or computer terminals. The brands surveyed and reported on are Apple, Radio Shack, Commodore, and IBM. Typical examples of brands not surveyed but mentioned as used (the four brands reported on account for over 85% of computers used) are Kaypro, Atari, and Franklin. Sinclair or Timex hand-held computers are not included, nor are mini-computers, or terminals supported by remote mainframes. Microcomputers in classroom networks were counted individually.

## CAI Versus Administrative Use

Only microcomputers used for student instruction were counted. Microcomputers used for administration were not counted. In this text, the number of computers used in a district or the district use of a microcomputer reflects the use of micros for instruction in the schools that are under the district's jurisdiction rather than any use at the district office itself.